

TEACHER PERCEPTIONS RELATING TO THE  
NEWER COMMUNICATIONS MEDIA;  
A STUDY OF TEACHER PERCEPTIONS AS  
RELATED TO THE USE OF THE NEWER  
COMMUNICATIONS MEDIA AND THE  
NATURE AND QUALITY OF SUCH USE

Thesis for the Degree of Ph. D.  
MICHIGAN STATE UNIVERSITY  
John V. Battram  
1963



This is to certify that the  
thesis entitled  
Teacher Perceptions Relating to the Newer Communications  
Media: A Study of Teacher Perceptions as Related to the  
Use of the Newer Communications Media and the Nature and  
Quality of Such Use

presented by

John V. Battram

has been accepted towards fulfillment  
of the requirements for

Ph. D. degree in Education

A handwritten signature in cursive script, reading 'Chas. F. Schuller'. The signature is written in dark ink and is positioned above the title 'Major professor'.

Major professor

Date August 5, 1963

O-169









Engl

o 9

1

## ABSTRACT

### TEACHERS PERCEPTIONS RELATING TO THE NEWER COMMUNICATIONS MEDIA: A STUDY OF TEACHER PERCEPTIONS AS RELATED TO THE USE OF THE NEWER COMMUNICATIONS MEDIA AND THE NATURE AND QUALITY OF SUCH USE

By John V. Battram

The study began with four problems. They were:

1. The construction of an Index of Audiovisual Values.
2. Exploration of the extent to which teachers in an individual school exhibit common perceptions about the program, thus permitting the assignment of a perceptual pattern to an individual school.
3. Measurement of the individual's level of behavior with respect to instructional materials (e. g. the extent and nature of use made).
4. Exploration of the relationship between a teacher's perception of availability of materials and his behavior.

The construction of the perceptual instrument followed a format originated by Robert E. Bills in his Index of Adjustment Values.<sup>1</sup>

---

<sup>1</sup>Robert E. Bills "Instruction Manual for Index of Adjustment Values", University of Kentucky. (Mimeographed Manual).

This format provided a scaling of a group of 33 perceptual items on six different scales. The six scales were as follows:

1. Self-concept of Program.
2. Self-acceptance of Program.
3. Self-idealization of Program.
4. Peer-concept of Program.
5. Peer-acceptance of Program.
6. Peer-idealization of Program.

The thirty-three items were selected from an original list of 122 possible characteristics of audiovisual programs. The process of elimination tailored the instrument to the schools studied. Additional data for evaluation and correlation was secured from interviews of the teachers.

The reporting of the data focused upon discrepancy scores which were obtained by subtracting selected scale scores. Originally an effort was made to characterize individual schools in terms of a common institutional pattern. It did not prove possible to develop a common institutional pattern on the bases of the technique and instruments used in this study.

#### Findings of the Study

In terms of the initial problems studied, findings were as follows:

1. It is possible to construct an Index of Audiovisual Values which will provide data concerning how teachers perceive the audiovisual program.



2. The index did not prove successful for the establishment of a composite or group measure. Teachers in the individual schools did not manifest sufficiently similar scores on the perceptual scales to permit the assignment of a pattern or score which would be truly representative of the total group.
3. When, as in this case, the nature of use is conceived as something more sophisticated than quantity of use, the techniques used here are not adequate.
4. This study discovered no relationship between stated performance and the perception of availability of materials.

#### Conclusions

Conclusions and implications of the study were as follows:

1. Teachers who hold a high concept of their own performance with modern media are more likely to increase and improve their use of modern media than those teachers who have a low concept of their own performance with modern media.
2. Teachers with a high concept of their own performance with modern media are more likely to learn from their peers and emulate their behavior than are teachers who have a low self performance concept.



3. Teachers who perceive the audiovisual materials as not being available are less likely to learn from their peers and emulate their behavior with respect to modern media than are teachers who perceive the materials as being readily available.
4. Teachers who perceive materials as being readily available do not share a common potential to act upon that perception.
5. Teachers' perceptions of the availability of materials do not appear to be capable of generalization because of their tendency to think primarily in terms of specific materials and specific sources of materials.
6. There is no apparent relationship between a teacher's concept of his own performance and his perception of the availability of audiovisual materials. Any effort to infer one from the other would be in error.
7. The use of perceptual patterns, as developed by Robert E. Bills, to establish an institutional or composite pattern of a school faculty's perception of an audiovisual program, as attempted in this study, is not a fruitful approach.

TEACHER PERCEPTIONS RELATING TO THE NEWER  
COMMUNICATIONS MEDIA: A STUDY OF TEACHER  
PERCEPTIONS AS RELATED TO THE USE OF THE  
NEWER COMMUNICATIONS MEDIA AND THE NATURE  
AND QUALITY OF SUCH USE

By

John V. Battram

A THESIS

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

College of Education

1963

## ACKNOWLEDGMENTS

Gratitude and appreciation is expressed to all those who aided and encouraged the writer toward the completion of this study. To attempt to list them all would be futile; leading to certain omissions. Especial appreciation is extended to the members of the guidance committee Charles F. Schuller, chairman; Walter F. Johnson, Herbert C. Rudman, and William H. Form.

## TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION TO THE PROBLEM . . . . .	1
Statement of the Problem . . . . .	3
Statement of Sub-Problems . . . . .	3
Purpose of the Study . . . . .	4
Theoretical Assumptions . . . . .	5
Definition of Terms. . . . .	7
Limitations of the Study . . . . .	9
Organization of the Remainder of the Thesis. . . . .	11
II. AUDIOVISUAL ATTITUDES AND PERCEPTUAL THEORY. . . . .	12
Introduction . . . . .	12
Some Attitude Studies in Audiovisual Instruction . . . . .	13
Perceptual Theory: An Historical Perspective . . . . .	22
III. THE SOCIAL SETTING: THE SCHOOL SYSTEM AND SCHOOLS SELECTED FOR THE STUDY . . . . .	30
Criteria for Selection of a School System . . . . .	30
The Audiovisual Program Selected . . . . .	31
A Rationale for Selecting Individual Schools . . . . .	34
The Program in the Individual Schools. . . . .	36
IV. THE METHOD OF THE STUDY . . . . .	43
General Description of the Method . . . . .	43
The Instrument: Development. . . . .	45
The Instrument: Administration. . . . .	48
The Instrument: Its Reliability and Homogeneity of Variance . . . . .	50
The Interview: Development of the Schedule. . . . .	52
The Interview: Administration . . . . .	54
V. RESULTS OF THE STUDY . . . . .	55
Introduction . . . . .	55
Performance Statement Grouping . . . . .	58
Availability Statement Grouping. . . . .	62
Low "d" Scores . . . . .	65
VI. SUMMARY AND CONCLUSIONS . . . . .	82
Summary of the Method . . . . .	82

Chapter	Page
Conclusions . . . . .	85
Recommendations for Further Study. . . . .	88
Unsuccessful Methodology and Additional Data . . . . .	93
Discussion: The Utility of Perceptual Theory . . . . .	95
BIBLIOGRAPHY . . . . .	97
APPENDICES . . . . .	100

# LIST OF TABLES

Table	Page
I. Reliability of Instruments Used. . . . .	51
II. Homogeneity of Estimated Variances . . . .	52
III. Derivations, Ranges, and Means for the Four Discrepancy Scores. . . . .	59
IV. Summary of Data Obtained When the Subjects were Grouped by Performance Statement. . . . .	60
V. Summary of Data Obtained When the Subjects were Grouped by Availability Statement. . . . .	63
VI. Examination of Low and Negative $d_1$ Scores. . . . .	67
VII. Low $d_2$ Scores Grouped into High and Low Contributing Scores. . . . .	69
VIII. Summary of Data Obtained when the Subjects were Grouped by School. . . . .	72



## CHAPTER I

### INTRODUCTION TO THE PROBLEM

Education today is faced with a host of problems and challenges: fewer teachers per capita, exploding school population, more information to be presented, shortage of classrooms, increasing costs, and others. At the same time, it is being called upon to consistently improve communications in the classroom. Concurrent with the demand for increased efficiency in classroom communication is a growing emphasis upon the whole range of resources, materials, and techniques now available to the classroom teacher. Some of these have become a part of classroom tradition; most have not. An indication of the nation's interest, in providing these modern media, is the National Defense Education Act of 1958. One title of this act provides funds for the provision of these media in increased amounts in the schools. Another title supports research projects to study modern media.

Studies have demonstrated the effectiveness and unique potential of such media as films, slides, tapes, disc recordings, and that group of visual media known as graphics. Research has demonstrated the importance of intelligent use and the adherence to proper techniques of utilization.

Most teacher-training institutions provide courses and training in the use of these modern media. Hundreds of school systems in United States and Canada have developed programs and facilities to provide instructional materials and the related consultation services and in-service training activities necessary to help improve their use in the classroom. However, experience in many of these programs has demonstrated that availability of materials and services are not enough to achieve general use. Many teachers do not readily accept new materials and techniques; nor do they, in many instances, tend to seek related consultation even when such assistance is readily available. It appears, therefore, that there must be factors operating, other than the availability or nonavailability of materials and consultation services, which influence teachers positively or negatively toward use of the newer media in their teaching.

It is felt by this investigator that teachers' attitudes play an important part in teachers' receptivity and subsequent use of modern communications media. Leaders in audiovisual instruction meeting at Yale University in September, 1953 and April, 1954 recognized the need for awareness and understanding of teachers' attitudes toward the audiovisual program:

The attitudes and training of our teachers will be the key factor in the success of any program for increasing the effectiveness of graphic communication in education. The attitudes and procedures of the teaching profession have been molded by centuries

of experience with the lecture and the textbook. The new graphic materials have no such sanctified tradition.<sup>1</sup>

Therefore, this investigator conducted a study of teachers' beliefs and feelings about the availability of these materials and facilitating services. Attention was given to the individual, his stated behavior, his beliefs about the program and his beliefs about how others see the program and their subsequent behavior.

## II. STATEMENT OF THE PROBLEM

It is the objective of this study to explore and attempt to identify relationships between teachers' perceptions concerning the audiovisual program and teachers' use or non-use of modern media of instruction. An important part of this exploration is that phase of the study which involves the construction and evaluation of a scale which will measure the perceptions held by individual teachers about the audiovisual program in their schools.

## III. STATEMENT OF SUB-PROBLEMS

1. Construction and evaluation of an index of audiovisual values. This instrument will be designed to quantify the following:

---

<sup>1</sup>Neal E. Miller (ed.), Graphic Communication (Washington, D. C.: Department of Audiovisual Instruction, National Educational Association, 1957), p. 35.

- a. How the teacher views the audiovisual program.
  - b. The value the teacher places upon these beliefs.
  - c. The ideal level the teacher would conceive for the program.
  - d. How the teacher thinks others view the program.
  - e. The value the teacher thinks others place upon their views of the program.
  - f. The ideal level the teacher thinks others would like to see for the program.
2. To explore the extent to which teachers in an individual school exhibit common perceptions about the program, thus permitting the assignment of a perceptual pattern to an individual school.
  3. Measurement of the individual's level of behavior with respect to instructional materials, e.g., the extent and nature of use made.
  4. To explore the relationship between a teacher's perception of availability and his stated behavior.

#### IV. PURPOSE OF THE STUDY

1. To develop direction for this investigator, and others, in future investigations of teachers' instructional materials behavior and ways in which pertinent perceptions may be modified or improved.
2. To provide a useful approach to, and format for, the study of teachers' views and beliefs concerning modern media and the programs and procedures established to encourage and facilitate their use.

## V. THEORETICAL ASSUMPTIONS

Based upon the earlier work of Snygg and Combs in theorizing the phenomenological field,<sup>2</sup> Robert E. Bills has formulated a theory of perception to aid in explaining personality and behavior. This theoretical base is helpful in studying the problem posed in this study. The instrument developed by Bills, known as the Index of Adjustment Values, provides a unique format for the construction of an instrument to study teachers' perceptions of the audiovisual program in their school.

This theory holds that:

1. An individual's behavior is consistent with his perceptions or beliefs about the world in which he lives. Therefore, behavior is a reflection of the perceptions held about another person, program, or institution.
2. An individual's perceptions are influenced by several variables, including his needs and values; the presence or absence of threat to his self-organization; opportunities for experience with stimuli; the perceiver's physiological state; and his beliefs about himself and other people. These latter perceptions, which are considered crucial to the foundation of this investigation, include

---

<sup>2</sup>Donald Snygg and Arthur W. Combs, Individual Behavior (New York: Harper and Brothers, 1949).

such factors as the self-concept, concept of the ideal self, self-acceptance and beliefs about other people's acceptance of themselves.

3. An individual's behavior is the effort made to maintain or enhance his self-organization. This implies that a person has information relative to his present self-organization (self-concept is a part of this self-organization) and a view of himself as he wished to be (concept of his ideal self). A significant portion of his behavior is directed toward bridging the gap. His self-satisfaction is directly related to the difference he perceives between his self-concept and his concept of his ideal self.
4. Other people base their reactions and judgments upon perceptions of the individual's overt behavior.
5. An individual can predict his behavior with about 80 per cent accuracy from his consciousness of his perceptual field.
6. An individual's behavior can best be understood by first becoming conscious of his perceptual field.
7. In studying a particular segment of an individual's behavior, it is necessary to limit the investigation to that portion of the perceptual field which has bearing upon the behavior in question. In this study, the concern is limited to the



individual's audiovisual behavior and, therefore, only those perceptions pertaining to audiovisual materials and programs need be investigated.<sup>3</sup>

## VI. DEFINITION OF TERMS

### Newer Communications Media

Modern technology has provided a wide range of visual and aural media which can increase the effectiveness of the classroom teacher by expanding the learning resources. In the context of this study the term "newer communications media" is delimited to those media (materials and devices) and their attendant services emanating from an audiovisual director's office and those media and services assigned to the responsibility of a building coordinator.

In the schools studied, the materials distributed from the audiovisual director's office were films, filmstrips, and recordings. In addition, the director participated in the purchase of new equipment and circulated kits of science equipment to elementary schools.

In the schools studies, the building coordinator ordered materials and kits from the central office and scheduled equipment in the individual building. This equipment

---

<sup>3</sup>Robert E. Bills, "About People and Teaching," Bulletin of the Bureau of School Service, College of Education, University of Kentucky, XXXII (December, 1955).

consisted of motion picture projectors, filmstrip projectors, record players, opaque projectors, and tape recorders.

#### Index of Audiovisual Values

The index of audiovisual values (see Appendix I) consists of a list of thirty-three items which are pertinent in defining the individual teacher's view of the audiovisual program in the school system studied. Each item is applied to six scales. The first three of these scales are the individual's present perception of each item; the value placed upon this perception; and the ideal perception held for the item. The remaining three scales require that the individual respond to these same three scales in terms of how he thinks his colleagues perceive the same items. The format for this instrument is that developed by Bills in the Index of Adjustment Values.<sup>4</sup>

#### Self-Concept

The self-concept developed in this study is the view of reality presently held by the individual teacher concerning the audiovisual program in his school. In a school system which provides centralized audiovisual services to the teacher, a teacher's composite perception of the audiovisual program in the individual school must include perception of the centralized activities.

---

<sup>4</sup>Robert E. Bills, "Instruction Manual for Index of Adjustment Values," University of Kentucky, Lexington, Kentucky. (Mimeographed.)

### Ideal-Concept

The ideal concept developed in this study is the individual's statement of how he would ideally see the program functioning.

### Instructional Materials Behavior

An individual's instructional materials behavior is defined in terms of use or non-use of the equipment and materials provided by the audiovisual service.

### Perceptual Field

The individual teacher's perceptual field as applied to the audiovisual program includes all of the beliefs, thoughts, and values held about the audiovisual service; and the persons, equipment, and materials included in that service.

### Perceptions

An individual teacher's perceptions are those discrete beliefs, thoughts, and values about the audiovisual program which, when combined, comprise his audiovisual perceptual field.

## VII. LIMITATIONS OF THE STUDY

In the interests of internal consistency and in order to eliminate additional levels of the school system, this investigation is limited to teachers, building coordinators, and principals in four elementary schools in the same school

system. A rationale for the selection of these schools is presented in Chapter III which describes the schools and the school system selected for the study.

A school system with an established audiovisual program was selected. The presence of a full time audiovisual director and centralized audiovisual services were among the criteria for the selection of a school system. Selection of a school system in this manner was designed to provide a program about which teachers could generate perceptions and would have had sufficient time for these perceptions to have crystallized.

Questions asked of the teachers concerning the program were limited to persons, equipment, and services having identification with the centralized audiovisual program. Services and materials of an audiovisual nature, such as other film sources, museum materials, and textbooks, were not included since they are not identified with the centralized program. Building coordinators chosen by a building principal represent both the building audiovisual program and the centralized program. Equipment scheduled by these coordinators and housed in the individual building is identified with the total program by the teachers, at least indirectly. A detailed description of the audiovisual program chosen for study is presented in Chapter III describing the schools and the school system selected for the study.

VIII. ORGANIZATION OF THE REMAINDER  
OF THE THESIS

Chapter

II. Audiovisual Attitudes and Perceptual Theory

This chapter presents a survey of attitude studies in Audiovisual Instruction and a historical account of perceptual theory.

III. The Social Setting

This chapter describes the school system and individual schools selected for study.

IV. The Method of the Study

This chapter describes the development and administration of the perceptual instrument and the interviews.

V. Results of the Study

This chapter presents in detail the report and interpretation of the data gathered in the study.

VI. Conclusions and Recommendations

The final chapter presents the interpretation of the data reported in Chapter V and recommendations for further study which arose from this exploration.

## CHAPTER II

### AUDIOVISUAL ATTITUDES AND PERCEPTUAL THEORY

#### I. INTRODUCTION

It is important that a foundation of research underly the use of each of the modern media as it is integrated in educational practice. The advantages and unique capabilities, in terms of educational communications, should be identified. The disadvantages and limitations of each must also be indicated. Once this is accomplished, there is yet another important consideration before the medium becomes readily accepted in the classrooms of the nation.

The classroom teacher must understand and accept the unique role of each of the modern media; the teacher must perceive the media as being appropriate and necessary to the learning process. To be able to describe, for an individual teacher or a group of teachers, the extent of this perception of value or receptivity would be useful to those actively promoting and facilitating the use of modern media.

Some would view this as an attitudinal problem. It is essentially the task of describing for each individual the discrepancy between reality and his perception of reality. This is a broader treatment than an attitudinal approach could provide.



To illustrate, suppose that two teachers, when compared to their colleagues, manifest an equally low level of use of modern media as indicated by records kept of such use. An attitudinal study reveals that one of these two individuals sees no value in these media and that the other values them highly. The attitude of the first would satisfactorily explain the manifest behavior. The attitude of the other would seem to be in contradiction to it. A perceptual approach to this contradiction might reveal that the latter, in addition to valuing these media highly, also perceives them as not being available or at least difficult to procure.

With this background this researcher reviews some attitude studies which have been conducted with teachers concerning audiovisual instruction and then embraces a theory of perception to aid in understanding this disparity between reality and the perception of reality.

## II. SOME ATTITUDE STUDIES IN AUDIO-VISUAL INSTRUCTION

The first study in Audiovisual Instruction to give attention to the classroom teacher and her thoughts, feelings, and problems was conducted by Winnifred E. Crawford in 1942.<sup>5</sup> This was a collection of dialogues or discussions, between supervisors and teachers, on the subject of "visual education." Some attempt was made to subjectively report behavior change

---

<sup>5</sup>Winnifred E. Crawford, Counseling With Teachers Concerning Visual Education (New York: New York University, 1942).

which occurred subsequent to the counseling. Although these discussions contained the raw materials for an attitudinal or perceptual analysis, no attempt was made to determine such patterns. The study does represent the concern of one investigator, at an early date, with how teachers felt about "visual education."

In 1952, Hyer in reporting "a study of the possible deterrents to the use of motion pictures" observed, "Availability of films and projectors is no assurance that teachers will use materials."<sup>6</sup> Pursuing this observation in an attempt to isolate factors common to various levels of use, she found that the following objective factors had little or no relationship to the level of film use:<sup>7</sup>

1. sex of teacher (no relationship)
2. age of teacher (slight negative relationship)
3. amount of education (no relationship)

She found that factors of an attitudinal or perceptual nature had a positive relationship to film use. Teachers who were rated highest in professional attitude were also the highest film users.

The way in which an individual ideally sees the audiovisual program becomes an important factor.

---

<sup>6</sup>Anna L. Hyer, "A Study of Possible Deterrents to Use of Motion Pictures Within a School system Where Films and Facilities for Use Were Provided" (unpublished Doctoral Dissertation, Indiana University, Bloomington, 1952); Studies in Education (School of Education, Indiana University, 1952), p. 171.

<sup>7</sup>Ibid., p. 174.

Teachers who state they would have liked to have used more films than they did were already using more films than teachers who stated they would not have liked to use more films.<sup>8</sup>

The use of films appears to be a reflection of the basic acceptance of them and their appropriateness to the experiences being provided in the classroom. Since this acceptance tends to widen the gap between high and low levels of use, this becomes an important perceptual dimension.

Perception of the supervisor's attitude toward films and their use as a factor in film use is suggested when she states, "Teachers who used more than the average number of films tended to favor supervisory attitudes which would develop expectancy of use."<sup>9</sup> It is noteworthy that in this study a control factor was the relatively high availability of adequate projection facilities and films. Still she reports, "Teachers . . . considered lack of adequate projection facilities and lack of available films important deterrents."<sup>10</sup> Here we see projection facilities and distribution procedures occurring as deterrants to the use of audiovisual media. These deterrants can be perceived or actual. Correct understanding of the reality of the problem is essential since two distinctly different procedures for remedy are suggested depending upon the accuracy of the perception.

---

<sup>8</sup>Ibid.

<sup>9</sup>Ibid.

<sup>10</sup>Ibid.



Yet another pair of statements reveal the necessity for understanding the way in which an individual is valuing the film service.

Whether or not teachers felt the available films were suitable to meet class needs appeared to be an important factor in the teacher's decision to use or not to use films. Teachers within a subject did not necessarily agree on evaluation of specific film titles.<sup>11</sup>

These statements represent valid considerations for decision to use or not use films. They tend to bear out the basic contention that teachers will vary in their perceptions and valuing of the use of the modern media and that variations in behavior can only be meaningfully understood in the light of these factors.

Another finding by Hyer suggests the presence of a common perceptual pattern for an individual school and the variability of these patterns between schools. She says, "The effect of leadership was most apparent in the comparisons of quantity of film use in the various subject areas from school to school."<sup>12</sup> This statement also suggests one factor which may be operating to create this common perceptual pattern for each school.

Finally, Hyer suggests three steps to reduce teacher inertia:<sup>13</sup>

1. To make it easy for teachers to use materials.
2. To provide films which correlate with the curriculum in sufficient abundance to challenge teachers to select and use them.

---

<sup>11</sup>Ibid.

<sup>12</sup>Ibid., p. 175.

<sup>13</sup>Ibid.

3. To increase the expectancy among teachers that films will be used.

Two of these three proposed steps are clearly concerned with the problem of teacher perception of the film program. The second proposal would provide materials in "sufficient abundance" to accommodate for the variability of individual perception in film selection. The third proposal would move directly to change and reshape a perception of leadership expectancy.

The first proposal is implicitly concerned with teacher perception since no change in administrative procedure to make materials easy to acquire is effective unless the improvement is perceived by the teachers. Thus we see that a number of the conclusions and implications direct attention to the soundness of a perceptual approach to the problem of attitudes toward audiovisual instruction.

In 1954, Nerden studied factors related to the use of motion picture films.<sup>14</sup> As did Hyer,<sup>15</sup> he saw that availability in itself did not necessarily promote use. He says, ". . . under favorable circumstances, some teachers used or limited their uses to only an occasional film."<sup>16</sup> Nerden isolated numerous objective factors which seemed positively related to film use. Then when he reports observations of

---

<sup>14</sup>Joseph T. Nerden, "A Study of Factors Related to the Use of Motion Picture Film by Public School Teachers" (unpublished Doctor's thesis, Yale University, New Haven, 1954).

<sup>15</sup>Hyer, op. cit., p. 174.

<sup>16</sup>Nerden, op. cit., p. 136.

a perceptual nature, he lists the following:<sup>17</sup>

#### Hindrances

11. It is hard to obtain films to fit my lesson plans or units of instruction.
12. It takes a great deal of my time to locate good films.
13. It seldom happens that I can get the film I want when I need it.

#### Encouraging Factors

16. I believe films make a substantial contribution to the education of my students.
17. My students react very well to films, judging from the discussions which follow.

Each of these statements reflects the value which individual teachers place upon films and the programs serving them. When teachers are encouraged to provide meaningful statements concerning their use or non-use of films, they tend to answer in terms of the values held as indicated in these statements.

Another grouping of responses collated by Nerden reflects the perceptions by one teacher of values held by others. For instance:<sup>18</sup>

18. Our superintendent of schools likes to have teachers use films.
19. Our principal of the school encourages teachers to use films.
20. Some of my fellow-teachers have had excellent results using films.

---

<sup>17</sup>Ibid., p. 141.

<sup>18</sup>Ibid., pp. 141-142.

24. The board of education looks with favor on the use of films by teachers.

Self-concept becomes a factor in film use as evidenced by this statement:<sup>19</sup>

26. I like to regard myself as a modern teacher using modern methods of instruction.

Nerden also found that such factors as sex, age, and education bear no relationship to the use of films. Combined with similar findings by Hyer,<sup>20</sup> it would seem reasonable to consider that such objective factors have no bearing upon the individual's attitudes toward the audiovisual program. In the light of these findings, it is suggested that a perceptually oriented theory may have utility in studying the views teachers hold of the audiovisual program.

Among Nerden's final observations occurs one which indicates that values placed upon films are but a part of a larger set of values held for curriculum materials.

Film users also appeared to be the same individuals who used a variety of other curriculum materials and were alert and anxious to experiment with new teaching techniques.<sup>21</sup>

This quotation hints at the possibility that perceptions of an audiovisual program are not limited to films but are developed with respect to a range of media. If such is the case, a perceptual study should deal with a wider range of materials and media.

---

<sup>19</sup>Ibid.

<sup>20</sup>Hyer, loc. cit.

<sup>21</sup>Nerden, op. cit., p. 144.



In another study of attitudes toward audiovisual materials, Kelley states, "There is a very high degree of relationship between the frequency with which teachers use audiovisual materials and their attitudes toward these materials. Those teachers who use materials most often seem to have better attitudes toward their use."<sup>22</sup> This statement points to the efficacy of understanding how teachers view and value the audiovisual program. Kelley states further in this regard:

The results of this study emphasize the importance of recognizing the place of attitude in any attempt to analyze the utilization of audio-visual materials. The teachers' attitudes may be more important in determining the use of audio-visual materials than both knowledge about materials and skill in their use.<sup>23</sup>

Several of Kelley's findings suggest the need for understanding how teachers view objective factors of the program.

There is a definite tendency for teachers to have better attitudes toward audio-visual materials if they feel that it is an easy matter to order the materials. This is a highly significant factor in determining attitudes.<sup>24</sup>

When the materials used by teachers are in poor condition, the teachers tend to have lower attitudes toward their use.<sup>25</sup>

---

<sup>22</sup>Galen B. Kelley, "An Analysis of Teachers' Attitudes Toward the Use of Audio-Visual Materials" (unpublished Ph.D. Dissertation, Boston University, 1959), pp. 104-105.

<sup>23</sup>Galen B. Kelley, "A Study of Teachers' Attitudes Toward Audio-Visual Materials," Educational Screen and Audio-Visual Guide, Vol. 39 (March, 1960), p. 121.

<sup>24</sup>Ibid., p. 105.

<sup>25</sup>Ibid., p. 107.

There is a very high degree of relationship between attitude toward audio-visual materials and satisfactory experience with their use.<sup>26</sup>

There is a highly significant relationship between the amount of equipment available and the attitudes of teachers toward the use of audio-visual materials.<sup>27</sup>

Another group of findings suggest the benefit to be derived from understanding the ways that other people have influenced the audiovisual attitudes and the value placed upon the attitudes of others:

There is a highly significant relationship between teachers' attitudes toward audio-visual materials and whether or not they have had the support of supervisors in the school system.<sup>28</sup>

There is a very high degree of relationship between teachers' attitudes toward audio-visual materials and the frequency with which they are used by fellow-teachers.<sup>29</sup>

There is a highly significant relationship between the type of learning experience the teachers have had during their training and their attitudes toward audio-visual materials.<sup>30</sup>

In the light of perceptually oriented considerations, it becomes important to understand the accuracy as well as the manifest quality or degree of attitude. In the foregoing instances, the question of accuracy of perception suggests whether the program or the perception of the program needs to be the focus of efforts toward change.

---

<sup>26</sup>Ibid., p. 105.

<sup>27</sup>Ibid., p. 105.

<sup>28</sup>Ibid., p. 104.

<sup>29</sup>Ibid., p. 105.

<sup>30</sup>Ibid., p. 106.

### III. PERCEPTUAL THEORY: AN HISTORICAL PERSPECTIVE

To find early conceptualization which contributes to modern day perceptual theory, one can begin with two eighteenth century philosophers, George Berkeley and Immanuel Kant. There appears no record of communication between Kant and Berkeley. However, their writings bear testimony to the similarity of conceptual development.

The basis of Berkeleian philosophy was "esse is percipi" (to be is to be perceived) as revealed by the quotation "their (things, generically speaking) esse is percipi, nor is it possible they (things) should have any existence, out of the minds or thinking things which perceive them."<sup>31</sup>

He arrived at this conclusion from reasoning concerning perception of distance; in his own words, ". . . it plainly follows, that the judgment we make of the distance of an object viewed with both eyes, is entirely a result of experience."<sup>32</sup> For Berkeley, to consider anything as existing before, after, or independent of, the perceiving mind is an error of logic.

Immanuel Kant also considered the function of time concepts in his thoughts about perceptions.

---

<sup>31</sup>George Berkeley, "Of the Principles of Human Knowledge," A New Theory of Vision and Other Writings of Berkeley, Part I (London: J. M. Dent & Sons, Ltd., 1910, p. 115.

<sup>32</sup>Ibid., p. 17.

Space and time . . . are intuitions and consequently single representations . . . through which many representations are brought to us as contained in one and in its consciousness . . . and those intuitions represent the unity of consciousness as synthetical, but yet as primitive.<sup>33</sup>

Sense is . . . a source of knowledge in its own right . . . our sensing is conditioned by the presence in our sensibilities of the forms of time and space which are not objective characteristics or frameworks of things, but "pure intuitions."<sup>34</sup>

Upon these early insights latter day theorists were able to build a more inclusive theoretical pattern. Another important contribution to this development occurs in the writings of Prescott Lecky.

Behavior cannot be explained in terms of either the organism or the environment alone. The task of adaptation must be conceived in relation to the organism and its environment jointly.<sup>35</sup>

Throughout his work is the theme of self-maintenance and self-organization as evidenced by these statements:

. . . all the acts of an individual have the goal of maintaining the same structure of values.<sup>36</sup>

. . . predictability is a function of stability and therefore of the basic need for consistent self-organization.<sup>37</sup>

---

<sup>33</sup>Immanuel Kant, "Critique of Pure Reason," Kant Presented by Julien Benda (New York: Longmans, Green and Co., 1940), p. 68.

<sup>34</sup>Encyclopaedia Britannica (1959) XIII, 268.

<sup>35</sup>Prescott Lecky, Self-Consistency (New York: Island Press, 1945), p. 76.

<sup>36</sup>Ibid., p. 81.

<sup>37</sup>Ibid., p. 90.

Lecky sees each individual striving for "movement from a disequilibrated condition toward one of equilibrium."<sup>38</sup> Lecky further sees these motivations influencing our values and perceptions and subsequently influencing behavior.

. . . he tends to select and avoid situations according to his estimate of his own abilities. On the basis of past experience, he predicts in advance whether new situations will be solvable or insolvable, and consequently whether his organization will be strengthened or disturbed if he faced the problem.<sup>39</sup>

We conceive of the personality as an organization of values which are felt to be consistent with one another. Behavior expresses the effort to maintain the integrity and unity of the organization.<sup>40</sup>

He must keep his interpretations consistent with his experience . . . he must organize his interpretations to form a system which is internally consistent. The consistency is not objective . . . but subjective and wholly individual.<sup>41</sup>

Lecky's theory of "Self-consistency" impresses the need for understanding the individual's point of view or more properly, perceptual field, before efforts are made to improve or modify behavior.

Hilgard reports the influence of John Dewey upon early perceptual theory.

Shortly before Dewey's death his interpretation of perception as a transaction between the organism and the environment began its way back into the literature of psychology.<sup>42</sup>

---

<sup>38</sup>Ibid., p. 100.

<sup>39</sup>Ibid., p. 115.

<sup>40</sup>Ibid., p. 152.

<sup>41</sup>Ibid., p. 152.

<sup>42</sup>Ernest R. Hilgard, Theories of Learning (New York: Appleton-Century-Crofts, Inc., 1956), p. 331.

Earl C. Kelley, as a result of psychological experiments of vision and perception, arrived at similar conclusions concerning perceptions and reality.<sup>43</sup> One of Kelley's discoveries led him to state that "we do not get our perceptions from the things around us but that the perceptions come from us."<sup>44</sup>

Kelley became very aware of the function of experience in perception and indicates its importance often.

No two people can do the same ascribing, because no two people can bring the same experiential background to the task.<sup>45</sup>

Whatever we have that is real in the whole situation comes from each of us (our past as experiencing organisms), and varies with each of us.<sup>46</sup>

Of reality, Kelley states:

Since the perception is the usable reality, and since no two organisms can make the same use of clues or bring the same experiential background to bear, no two of us can see alike. We have no common world.<sup>47</sup>

Reality comes from what we make of our clues, received by our sense organs, when we act upon them. . . external objects lack reality in their own right.<sup>48</sup>

He also reiterates Lecky's thoughts on behavior when he states that "perception (not the object) is a directive for action."<sup>49</sup> Hence, to understand the behavior one must understand the perceptions underlying the behavior.

---

<sup>43</sup>Earl C. Kelley, Education for What is Real (New York: Harper and Brothers, 1947).

<sup>44</sup>Ibid., p. 25.

<sup>45</sup>Ibid., p. 29.

<sup>46</sup>Ibid., p. 37.

<sup>47</sup>Ibid.

<sup>48</sup>Ibid., p. 40.

<sup>49</sup>Ibid.

Snygg and Combs made a major contribution to this development with their definition of the "phenomenological frame of reference" which postulates the "phenomenal field."<sup>50</sup> A basic postulate of this theory is, "All behavior, without exception, is completely determined by and pertinent to the phenomenal field of the behaving organism."<sup>51</sup>

In a recent revision of the original work Combs has reworked the above definition: ". . . all behavior, without exception, is determined by the perceptual field at the moment of action."<sup>52</sup>

It follows then that:

To produce change in behavior . . . it will be necessary to produce some change in the individual's perceptual field. To understand other people . . . we will need to understand, as clearly as possible, the factors controlling and limiting the processes of perceiving and the function of the perceptual field.<sup>53</sup>

From this it is concluded a first step in this understanding is to establish a method of studying the perceptual field of the individual. Robert E. Bills explains, "To change behavior we must start with the person."<sup>54</sup>

---

<sup>50</sup>Donald Snygg and Arthur W. Combs, Individual Behavior (New York: Harper and Brothers, 1949).

<sup>51</sup>Ibid., p. 15.

<sup>52</sup>Arthur W. Combs and Donald Snygg, Individual Behavior (rev. ed.; New York: Harper and Brothers, 1959), p. 36.

<sup>53</sup>Ibid.

<sup>54</sup>Robert E. Bills, "About People and Teaching," Bulletin of the Bureau of School Service, University of Kentucky, XXXVIII (December, 1955), p. 12.

Bills has contributed significantly through his contribution of such a method. Both Bills and Combs delineate certain factors which influence an individual's perceptual field. Combs lists seven such factors: (1) needs; (2) individual physiology; (3) time and opportunity; (4) goals, values, and techniques; (5) self-concept; (6) environment and culture; (7) availability of perceptions.<sup>55</sup>

Bills provides a similar list: ". . . their needs, values, physiological structure, threat, self-concept, beliefs about other people, and opportunity."<sup>56</sup>

Bills sets the stage for his method of investigation when he designates two of these factors as being most important. ". . . the most important factors in determining our perceptions are the beliefs we hold about ourselves and other people which are learned in interaction with them."<sup>57</sup> Using these two factors, Bills has developed a technique for characterizing an individual's self-other concept. By assigning a plus (+) or a minus (-) to each of these two factors, he defines the following:<sup>58</sup>

- (++) (1) People who accept themselves and who believe that other people in their peer group are equally or more accepting of themselves . . .

---

<sup>55</sup>Combs and Snygg, loc. cit.

<sup>56</sup>Bills, op. cit., p. 13.

<sup>57</sup>Ibid., p. 19.

<sup>58</sup>Ibid., p. 20.



- (-+) (2) People who are rejecting of themselves but who believe that other people in their peer group are more accepting of themselves . . .
- (+-) (3) People who accept themselves but who believe that other people in their peer group are not as accepting of themselves.

Bills' Index of Adjustment Values was conceived to measure two perceptual dimensions, self-acceptance and acceptance of others. These two dimensions in turn yield the perceptual patterns explained previously. Bills' technique also yields these measurements: concept of ideal self, propensity to change (discrepancy between self-concept and concept of the ideal self). Research with this technique has shown:

that ++ people are democratic individuals who have a high regard for the dignity, worth and integrity of people, including themselves, and faith in the efficacy of group action. To a lesser degree, the -+ holds these same beliefs and attitudes but he cannot believe that people are as worthy as does the ++ because of his attitudes toward himself. The +- person will obviously rank lowest in these ideals.<sup>59</sup>

. . . -+ people are highly accurate (probably over accurate) in their perceptions of reality, +- people are quite inaccurate, and ++ people occupy a medial position. . . . -+ people are unable to be inaccurate while +- people are unable to be accurate.<sup>60</sup>

. . . the -+ attempts to build himself, the +- assumes he is already built, and the ++ responds to the reality of the situation.<sup>61</sup>

In agreement with these findings, Combs states, " . . . from the point of view of the behavior himself, he is never

---

<sup>59</sup>Ibid., p. 21.

<sup>60</sup>Ibid., p. 23.

<sup>61</sup>Ibid., p. 24.

unmotivated."<sup>62</sup> We have stated the fundamental human need as a continuous search for personal adequacy.

Carl Rogers in applying a perceptual frame of reference to psycho-therapy states, "A person learns significantly only those things which he perceives as being involved in the maintenance or enhancement of the structure of self."<sup>63</sup>

Hilgard echoes these words in comparing Mead and Dewey on the concept of self:

Mead's interpretation of the self as arising out of social interaction is close to the spirit of Dewey . . . who saw every act as the expression of a unified self-seeking to resolve its conflicts through intelligent action in a world of objects and other selves.<sup>64</sup>

To understand the behavior of an individual, "we must understand him and this is most easily accomplished by trying to see him and his world as he sees them."<sup>65</sup> The Index of Adjustment Values provides a technique and a format for approaching this understanding.

---

<sup>62</sup>Combs and Snygg, op. cit., p. 56.

<sup>63</sup>Carl Rogers, Client-Centered Therapy (Boston: Houghton-Mifflin Co., 1951), p. 389.

<sup>64</sup>Hilgard, loc. cit.

<sup>65</sup>Bills, op. cit., p. 32.

## CHAPTER III

### THE SOCIAL SETTING: THE SCHOOL SYSTEM AND SCHOOLS SELECTED FOR THE STUDY

#### I. CRITERIA FOR SELECTION OF A SCHOOL SYSTEM

A school system with an audiovisual program that had been established for a number of years was necessary to provide a proper environment for a perceptual study. The audiovisual program had to be in operation long enough for procedures to have become routinized and effective, and for teachers to have developed perceptions about the program. Thus, a school system was sought which had a program that had been in operation for at least eight years. This period of time was considered sufficient for teachers to have developed perceptual patterns and patterns of use on an institutional basis. The program was to have a director, building coordinators, a well defined program of specific services and materials, a distribution system, and a system of cataloging and communicating its services and materials to the teachers in the school system.

A school system was needed which was sufficiently large to allow selection of several elementary schools on the basis of a predetermined rationale. It was felt that a school system in a city of 100,000 persons or more would

provide such flexibility. There were several school systems in southern Michigan which fulfilled this requirement. It was decided to investigate these cities for an established program of audiovisual services.

## II. THE AUDIOVISUAL PROGRAM SELECTED

The school system selected is in southwestern Michigan. The audiovisual program had been established approximately ten years at the time the study was conducted. The school system had an audiovisual supervisor, who described his primary job as one of "selection and distribution" of equipment and materials. During the school year 1957-1958, this school system had a total of 45 elementary schools. They varied in size from three teachers to twenty-five teachers.

The materials that were distributed from the office of the supervisor included films, filmstrips, and records. In addition, some models, science kits, and specialized equipment (e.g. microprojectors, telescopes, etc.) were circulated from this office. The materials were distributed daily to the schools by truck. Occasionally, special trips were made, particularly to deliver equipment. The school system also contracted with the local museum for mounted pictures, charts, exhibits, recordings, models, stuffed animals, collections of artifacts, etc. Under this contract, the museum also sponsored field trips to the museum and to other points of interest in the city, and presented illustrated talks to individual class groups as requested. The



museum had a small film library which covered primarily scientific topics. These are all services which are identified with audiovisual or instructional material programs in some school systems.

Children's books were circulated in collections by the Elementary Division (Elementary Supervisor's Department). This division also purchased and distributed maps, globes, and less expensive models and realia which remained in the individual schools.

The supervisor had a staff which handled all routine matters such as accessioning, distributing, inspection, and repair of materials and equipment, and all paper work attendant to these services. The supervisor was involved in in-service activities in the operation of equipment and the correct utilization of materials and devices. He also acted as a consultant to building principals and to the administration, in connection with purchase of equipment and the equipping of buildings for use of audiovisual equipment. He had recently been involved in the development of an elementary science curriculum guide which included a complete listing of materials and resources available for each topic. This activity was to be extended to other subject matter areas of the elementary curriculum.

The selection of materials was done by teacher committees chosen for each grade level and subject interest. Materials were previewed by these committees and purchase was determined by their recommendations. Materials were

also sent to individual schools to be viewed by groups of teachers for their recommendations. From these reports, new materials were added to the library.

Several copies of a printed catalog were available in each school building. The catalog was revised, but not on a regular schedule. Supplements were sent to the schools regularly. At the time of this study, there were a sizeable number of supplements.

Each building had an audiovisual building coordinator whose responsibilities varied from school to school depending upon the degree to which the principal was active in the provision of learning resources. The role of this person, in each school, will be described later in this chapter when the schools are described. In the elementary schools, each teacher was expected to perform certain non-teaching duties, sometimes of a supervisory nature. The position of audiovisual building coordinator was one of the possible duties a teacher could assume to fulfill this expectation. Often principals asked for volunteers for the various duties. Therefore, the position of audiovisual building coordinator was filled sometimes by a volunteer and other times by an appointee. As a result, the motivation of the building coordinator varied from school to school, perhaps more than if the position were on a completely voluntary basis.

Although the building coordinator assisted with and coordinated the requests for materials, she did not have to concern herself with distributing the materials when they

arrived. Materials circulated by the central office were addressed directly to the individual teacher who requested them. The supervisor's experience in this matter indicated that this resulted in better and more direct service to the teachers, helped them to identify these materials with the services of the central office, and helped to protect against use of materials without advance planning.

Most of the elementary schools maintained filmstrip and record collections and supplemented these with those available from the central office.

### III. A RATIONALE FOR SELECTING INDIVIDUAL SCHOOLS

In selecting individual schools within the school system, for the purposes of this study, two criteria, frequency of audiovisual use and quality of audiovisual use, were used to differentiate the schools. Frequency of use was easily established by monthly utilization reports prepared in the supervisor's office. The second factor was the supervisor's judgment of the quality of audiovisual use in the individual schools. The supervisor worked closely with individual teachers and groups of teachers in the elementary schools. This relationship with the individual schools enabled him to designate certain schools as being characterized by highly effective use of audiovisual services and materials, and to indicate others whose use was primarily ineffective in nature.





It was recognized that having the supervisor select the schools in terms of quality of use of materials introduced a subjective factor in the selection process. He was not asked to characterize each school in the system, but rather to choose two schools at each of the extremes. This did not require subtle delineations among the schools. Also, his ability to do this was heightened by the closeness with which he had worked with the individual schools.

Other methods of achieving this classification were considered. The original purpose of such a classification was to select schools which would have a greater likelihood, than a random sample, of reflecting differing perceptual patterns. In this light, it was not deemed necessary to spend large amounts of time and effort with involved techniques to achieve this categorization.

By placing these two factors, one objective and one subjective, into a two-by-two table, four basic characteristic patterns were produced. They are:

	Frequent	Infrequent
Effective	A	B
Ineffective	C	D

One school was chosen for each combination of the two criteria, thus resulting in four schools, each with a different utilization pattern in terms of the two factors.

## FREQUENCY OF USE OF THE FOUR SCHOOLS 1958-1959

	Teachers	Circulation of Materials From Central Office	Average Use Per Teacher for the Year
A	14	269	19.21
B	10	107	10.70
C	13	269	20.69
D	16	92	5.75
Average	13.6	174.71	12.84

Schools A and C were about average in size, but both ranked in the upper 10 (or 25%) in circulation. School B was a small school and fell below the average in circulation. School D was one of the largest elementary schools in the system. It ranked in the lower 10 (or 25%) in circulation.

In the supervisor's judgment, effective use was that use which involved proper preparation of teacher and pupils and proper follow-up discussion and testing. Ineffective use was that use in which the above activities were lacking or were handled in a perfunctory and minimal manner.

#### IV. THE PROGRAM IN THE INDIVIDUAL SCHOOLS

It is important to develop a degree of understanding of the audiovisual program in the individual schools. This description includes the equipment available, the light control facilities in the building, and the roles of the

principal, building coordinator, and secretary in the scheduling and distribution of equipment, materials, and facilities. This information was gathered in visits to the four schools and in interviews with the principals.

To assist in understanding the faculty of each school and its unique characteristics, a short paragraph of descriptive factors is provided for each school. Objective in nature, these facts were secured on a cover sheet when the scales were administered. From this data, certain basic generalizations are drawn about the faculty of the school.

#### School A

School A exhibited a pattern of high frequency of use and was designated by the supervisor as having teachers who were considered highly effective in their use of audiovisual materials.

This school was one of the older elementary schools in the school system. Since it did not have large expanses of glass, light control was not a major problem even in those rooms which did not have blackout shades. The school was a two-story building with one room on each floor specifically equipped with blackout shades and wall screens. These two rooms were not used as classrooms but were scheduled for projection use by the secretary in the office. Each room had a 16mm motion picture projector and a slide-filmstrip projector. The slide-filmstrip projectors were also available for classroom use. In addition, there were two opaque



projectors, one tape recorder, a variety of phonographs, and one standard lantern slide (3-1/4" x 4") projector which were available for use in the classrooms upon request.

The building principal and the building audiovisual coordinator worked closely together. This was the coordinator's first year in the position. The building secretary handled routine matters such as scheduling.

School A had 14 teachers. Of these, 11 had had four years or more of experience, 8 were forty years of age or older, 7 had had four or more methods courses, 6 had had audiovisual course or workshop experience, 11 held a life certificate, and 11 had been in this school for three years or more. The faculty of School A can be said to have been mature, experienced, well trained, and had worked together long enough for good rapport to be expected.

#### School B

School B exhibited a pattern of infrequent use but was designated by the supervisor as having teachers who were considered highly effective in their use of audiovisual materials.

This school was also an older building. It was three stories high. Here, too, light control in classrooms was not the problem that it was in newer buildings. There was one room in the building equipped for the use of projected materials. There was one motion picture projector, two slide-filmstrip projectors, one opaque projector, and several

phonographs. There was no tape recorder. On occasion, a tape recorder was borrowed from the supervisor's office. There appeared to be no organized method of scheduling the projection room.

The principal of School B was one of the early promoters of audiovisual instruction in Grand Rapids, having served on a committee whose recommendations resulted in the establishment of the central program and the hiring of the present supervisor. She was proud of this early leadership and felt the school was in step with modern media use.

The building coordinator's primary responsibility in this building centered around the filmstrip library. She assumed responsibilities for purchases and for distribution of filmstrips.

School B had 10 teachers on the faculty. Of these, 8 had had four years or more of experience, 8 were thirty years of age or over, and 7 were forty years of age or over, 8 had had an audiovisual course or workshop, 8 held a life certificate, and 8 had been in this school for three years or more. School B also had a mature, experienced, well trained group of teachers (fewer had had a large number of methods courses) and had worked together for some time.

#### School C

School C exhibited a pattern of frequent use and was designated by the supervisor as having teachers who were not using audiovisual materials in an effective manner.

This was a new building, having opened in September, 1956. It replaced an older building which had operated for about fifty years. The building was two stories high. Light control was a definite problem. The classrooms on the south side of the building were equipped with audiovisual venetian blinds to cover the outside windows. There was a clerestory panel of glass opening on the hallway. There was no light control for the clerestory in any of the classrooms. The classrooms on the north side of the building had no light control. Half of the fourteen classrooms had darkening facilities and half did not. For those teachers whose rooms were without darkening, there was a darkened room which could be used for projection. The equipment consisted of two 16mm projectors, one slide-filmstrip projector, one opaque projector, several phonographs. There was a small collection of filmstrips and disc recordings which were housed in the building.

The principal worked very closely with the building coordinator in scheduling equipment and maintaining the equipment properly. The principal believed in the value of modern media and actively promoted materials and services in meetings and in a consultant capacity with the teachers.

School C had 13 teachers. Of these, 11 had had four or more years experience, 9 were thirty years of age or over, and 5 were forty years of age or over, 8 had had four or more methods courses, 9 had had an audiovisual course or workshop, and 7 held a life certificate; 6 teachers were



teaching in this school six years or more. This was a mature, experienced, well trained group of teachers who have not worked together for a long period of time, and were probably still in the process of developing rapport and understanding.

#### School D

School D exhibited a pattern of infrequent use and was designated by the supervisor as having teachers who were not using audiovisual materials in an effective manner.

The elementary school was housed in a building with a junior high school. The building was quite large, two stories high and approximately twenty-five years old. The building did not have large expanses of glass and each classroom could be darkened for some projection although the classrooms were not equipped with blackout shades or projection screens. One room was equipped for projection and was scheduled by the secretary in the office. The equipment consisted of one 16mm motion picture projector, two slide-filmstrip projectors, and several phonographs. A tape recorder and opaque projector could be borrowed from the junior high school when they were not in use there. There was a building collection of filmstrips and recordings. These were kept in a storage room which opens to the hall.

Often when an elementary school is housed in a junior high, the elementary classrooms are grouped together and sometimes comprise one wing of the building. Such was not the case in this school. The elementary classrooms were

interspersed with the junior high school classrooms on both floors. Thus, at regular intervals, bells rang and pupils moved outside each elementary classroom. There was a recently furnished crafts room which was well equipped and supplied for arts and crafts projects.

The principal, a woman, was in fact an assistant principal to the junior high school principal. She also had guidance and counseling responsibilities at the junior high school level. She had been moved from another school in the middle of the previous school year, upon the sudden retirement of a principal of long standing.

Due to her part-time status, the principal left the promotion of the program entirely to the building coordinator. The building coordinator was very interested in her job and actively worked to keep teachers informed, and to generally smooth the way for effective use. She had little time to do this work. This was her first year in this position.

Of the 11 teachers at School D, 8 had four or more years experience, 7 were thirty years of age or over, 4 had had four or more methods courses, 4 had had an audiovisual course or workshop, 8 had held a life certificate, and 7 had been in this school three years or more. This was a staff who did not quite reflect the same degree of training as the teachers in the other schools. They were mature and experienced, and most of them had worked together for several years.

## CHAPTER IV

### THE METHOD OF THE STUDY

#### I. GENERAL DESCRIPTION OF THE METHOD

The study was conducted in two major parts. The first part was the construction, administration, and interpretation of a perceptual instrument. The second part included the construction of an interview schedule, and conducting of interviews and the collation and correlation of the interview data.

Previous applications of this theoretical position had made use of a format originated by Robert E. Bills in his Index of Adjustment Values.<sup>1</sup> This format provided a scaling of a group of perceptual items on six different scales. The six scales were as follows:

1. Self-concept of Program. This scale measured the subject's present perception of the perceptual items or characteristics.
2. Self-acceptance of Program. This scale measured the subject's feelings or valuing of the perceptions expressed on Scale 1.

---

<sup>1</sup>Bills, "Instruction Manual for Index of Adjustment Values," op. cit.

3. Self-idealization of Program. This scale measured the subject's ideal perception of the perceptual items.
4. Peer-concept of Program. This scale measured the subject's perception of how his peers presently perceive the perceptual items.
5. Peer-acceptance of Program. This scale measured the subject's perception of his feelings or valuing of the perceptions expressed on Scale 4.
6. Peer-idealization of Program. This scale measured the subject's perception of how his peers would ideally perceive the perceptual items.

This technique made it possible to gather a considerable body of perceptual data in a minimum of time. The purpose of using such an instrument was to scale the perceptions of teachers on a list of items that were descriptive of the audiovisual program. The construction of a perceptual instrument involved modifications of Bills' format and preliminary testing of its construction.

The interview phase of the study was used to check and validate the perceptual instrument. Therefore, the interview questions were patterned around the questions and responses of the perceptual instrument. Since the total population studied was small ( $n = 51$ ), all subjects were interviewed.

Sections II and III of this chapter describe in detail the methods and techniques used to complete the steps outlined

above. Section IV reports the statistics employed for reliability and homogeneity of variance. These statistical considerations were basic to the validation of the instrument, and were also important to the development of the interview questions.

## II. THE INSTRUMENT: DEVELOPMENT

The first task in developing a perceptual instrument for the study was the selection of a list of characteristics of an audiovisual program about which teachers would have perceptions. It was known that Bills in constructing his Index of Adjustment Values had started with 129 personality variables and had reduced them to 49,<sup>2</sup> which were determined to be the most discriminating of the original list.

It was decided to follow a similar procedure in selecting items for the Index of Audiovisual Values. A list of characteristics was prepared. In preparing this list, a number of recognized publications were scanned for such characteristics. This list was submitted to two authorities in the field of audiovisual instruction for their comments and suggestions. As a result of their suggestions, the list was enlarged and corrections made for clarity of statement. The enlarged list of characteristics number 122 items.

---

<sup>2</sup>Ibid.

At this point in the development of the instrument, it was realized that reduction of these items would need to be in terms of the school system being studied. Some characteristics which would be valid in other programs were not applicable due to the peculiar organization of the program in the study. With the assistance of the supervisor, the list of approximately 120 possible characteristics of an audiovisual program was reduced to 34 characteristics which were best descriptive of his program. In one or two cases, this reduction took the form of combining two similar items and reworking the statement of the item.

The 34 items were then typed on cards, one to a card, and resubmitted to the two authorities who had checked the original list. Each item was again checked with the two authorities as a possible characteristic of an audiovisual program about which teachers could develop perceptions. The authorities also checked for clear, concise statement of each characteristic.

Next, a pilot instrument was prepared and duplicated. The pilot instrument used the first three scales of Robert E. Bills' basic format for perceptual instruments. The scales seek responses as follows:

Scale 1. How much of the time do you believe each of the following characteristics of the audiovisual program in your school is adequate?

Scale 2. How do you feel about the adequacy of each of these characteristics of the audiovisual program in your school?

Scale 3. Ideally, how much of the time do you believe each of these characteristics of the audiovisual program should be adequate?

The remaining three scales request that the subjects respond to the same items with the same scales, but for their peers rather than themselves. It was felt that for the purposes of a pilot study that this repetition would be unnecessary.

The pilot instrument was administered to a group of evening college students who were attending an introductory course in Audiovisual Instruction at Michigan State University. Of the 45 subjects in the pilot group, only 17 instruments were completed with responses in all 102 spaces. In a number of instances, the subjects stated that the item was not applicable to their present situation. This inapplicability seemed to indicate the need for individualizing the list of characteristics in terms of the program being studied.

The pilot study provided the investigator with valuable experience in anticipating the problems experienced by subjects and also provided experience in the kind of urging needed to encourage subjects to complete the instrument.

The value of this experiment is reflected in the low number of incompleting instruments in the actual project.

This information was also helpful when writing directions and instructions to those administering the instrument.

Due to the low number of pilot subjects who felt that they could respond to every item, it was decided not to run reliability statistics on the pilot study. Even without this information, the pilot study proved to be a very worthwhile step in the procedure.

After the pilot administration, one more item was dropped from the list. The number of items in the final instrument was 33. (See Appendix A for a sample copy of the pilot instrument.) Several minor changes were also made in wording at this time. Cover sheets and written directions were developed and included in the final instrument. (See Appendix A for sample copy of the final instrument.

### III. THE INSTRUMENT: ADMINISTRATION

The administration of the perceptual instrument was completed in one day through the cooperation of the four principals whose schools were studied. This was considered impractical until additional personnel became available to assist in the administration of the instrument.

In the school system studied, Mondays are designated for faculty meetings in the individual schools. In the elementary schools, these are held either at lunch or after school. With the cooperation of the four principals, two faculty meetings were scheduled at noon and two after school.



A second person was engaged to assist in administering the instrument. This individual had had experience with another of the instruments developed on Bills' format and required a minimum of orientation. Each administrator had a set of typed instructions. (See Appendix A for a copy of these instructions.) These were read to each group so that all groups received uniform instructions and orientation to the measuring instrument.

The administration of the instrument occurred with a minimum of difficulty. At three of the four schools, no problems arose. At School D, several small irregularities occurred. After the teachers had begun the instrument, two of them indicated that they worked with blind children in special education classes. They were dropped from the population being studied. No mention had been made of these persons in preliminary arrangements with the principal.

Later, in the administration of the instrument, two individuals, the principal and one teacher, refused to complete the instrument. The principal indicated she had not been at the school long enough to respond for others. All efforts encouraging her to complete the instrument were ineffective. The teacher did not inform the investigator of her refusal until the others were almost finished. She completed only a portion of the first three scales. She was later interviewed and proved a willing subject.

Another teacher at School D was very intense about responding to the instrument and took twice as long to

complete the instrument as any other teacher in the study. When she left, she remarked to the investigator, "I hated every minute of the experience. You didn't learn anything from me this way." However, this teacher proved to be a cooperative interview subject.

#### IV. THE INSTRUMENT: ITS RELIABILITY AND HOMOGENEITY OF VARIANCE

This instrument represented a new application of Robert Bills' format for gathering perceptual data. It was "tailor-made" to explore the perceptions by teachers of a particular audiovisual program. In order for data from a newly constructed instrument to be useful in drawing comparisons, it must be tested for internal reliability. Earlier instruments using this format have estimated test reliability by using Hoyt's test of weighted measures by two-way analysis of variance.<sup>3</sup> The reliability coefficients ( $r_{tt}$ ) and F ratios for the six scales are presented in Table I.

The F ratios for variance among the subjects were significant at the .01 level of confidence for all six scales.

The F ratios for variance among the items were significant at the .01 level of confidence for five of the six scales. They were scales 1, 2, 4, 5, and 6. The F ratio for scale 3 was significant at the .05 level of confidence.

---

<sup>3</sup>Cyril J. Hoyt and C. L. Stunkard, "Estimation of Test Reliability for Unrestricted Item Scoring Methods," Educational and Psychological Measurement, XII, No. 4 (1952), pp. 756-758.

TABLE I  
RELIABILITY OF INSTRUMENTS USED

Measure	$r_{tt}$	$F_1$	$F_j$	$SE_m$
1. Self-concept of Program	.931	14.528*	16.094*	5.47
2. Self-acceptance of Program	.922	12.801*	7.690*	4.91
3. Self-idealization of Program	.914	11.582*	6.84**	5.78
4. Peer-concept of Program	.900	10.047*	8.513*	6.17
5. Peer-acceptance of Program	.934	15.166*	7.660*	4.36
6. Peer-idealization of Program	.969	31.179*	11.356*	4.29

\*F significant at .01 level; \*\*F significant at .05 level.

When four institutions are to be compared in terms of measures of central tendency on the same scale, the scores must come from the same or comparable populations as reflected by homogeneity of variance. In this study, the assumption of the homogeneity of variance was tested by Welch's equation for  $L_1$  employing Hartley's modification of the geometric mean and using Nayer's tables of the  $L_1$  distribution. (See Table II.)

The test of homogeneity of variance is accepted at the .05 level of confidence for scales 1 through 5. Scale 6 does not meet the required level for acceptance of homogeneity. A check of the data revealed that the score of one

individual, in School D, caused scale 6 to appear non-homogeneous. This same individual has been mentioned earlier as having taken exceedingly long with the instrument and stating freely the distaste she felt in executing the instrument. Removal of this individual's responses would result in acceptance of the homogeneity test on scale 6 at the .05 level of confidence.

TABLE II  
HOMOGENEITY OF ESTIMATED VARIANCES

Measure	L	$\bar{F}$	P
1. Self-concept of Program	.9069	11	.05
2. Self-acceptance of Program	.8887	11	.05
3. Self-idealization of Program	.9052	11	.05
4. Peer-concept of Program	.9286	11	.05
5. Peer-acceptance of Program	.9125	11	.05
6. Peer-idealization of Program	.7847	11	.06

#### V. THE INTERVIEW: DEVELOPMENT OF THE SCHEDULE

In developing the interview schedule, the investigator was originally interested in examining those attitudes and factors which could reflect the perceptual pattern determined by the Index of Audiovisual Values. The interview questions were, therefore, designed to elicit attitude statements on such items as the following:

1. The teacher's basic feeling about audiovisual materials, as they related to his teaching situation.
2. Why they felt this way.
3. A statement concerning the frequency of use of filmstrips, films, and recordings.
4. A comparison of others' use with the teacher's own use.
5. Whether the principal encouraged or discouraged use of these media.
6. Feelings about the adequacy of the teacher's own use and of use by others.
7. Whether teachers should make greater or less use of the materials.
8. A statement of the inherent values of modern media.
9. The strong features and shortcomings of the program.
10. A statement concerning their use of materials or techniques recommended by others.
11. Others' use of recommended techniques and materials.

The remaining questions in the interviewing schedule were patterned directly after items in the list of 33 characteristics. These included: quality of materials available, condition of materials available, adequacy of the selection, availability of materials when desired, arrival of materials on time, availability and condition of equipment, and the need for more equipment. A copy of the interview questions is provided in Appendix B. The same questions were used in as close to the same manner as possible in each interview.

## VI. THE INTERVIEW: ADMINISTRATION

A team of three experienced interviewers was engaged. The investigator interviewed the four principals and also conducted the interviews at School D. The interviews were scheduled before school, during the noon hours, and after school. By means of careful scheduling, all interviews were conducted within a period of one school week.

Each interviewer was provided with an instruction sheet which also provided some background information concerning the study. This information was supplied so that they might answer questions intelligently and allay apprehensions where necessary. (See Appendix B for the interview instruction sheet.)

Four individuals, who had completed the perceptual instrument, were not interviewed by reason of absence or, in one case, refusal to participate further. These four cases were deleted from the data.

## CHAPTER V

### RESULTS OF THE STUDY

#### I. INTRODUCTION

The reporting of the data is based upon discrepancy (d) scores which were derived by subtracting scores from selected pairs of columns. Figure 1 shows the arrangement of the column scores to secure four "d" scores.

A small table of this kind was made for each subject. The reporting concentrates upon  $d_1$  and  $d_2$  and includes  $d_3$  and  $d_4$  when they seem pertinent or relevant.

The  $d_1$  discrepancy score is the difference between the individual's idealization of the program (Column III) and his actual perception of the audiovisual program at the time of the study. If this difference is zero or close to zero, then the individual does not manifest room for growth or development. This lack of difference can result from individuals who have a low actual perception and a low ideal. They can also result from individuals who have high actual and ideal perceptions or they can fall at points between the extremes. These low "d" scores are discussed later in this chapter.

For individuals to have the necessary room to improve their use of modern media, they must first have a difference

on the " $d_1$ " discrepancy score. This difference must be sufficiently large to provide ample room for such growth. However, an extremely large  $d_1$  may be as paralyzing as the low or zero  $d_1$ .

	Actual	Ideal	
Self	I	III	$d_1 = \text{III} - \text{I}$
Other	IV	VI	$d_3 = \text{VI} - \text{IV}$
	$d_2 = \text{IV} - \text{I}$	$d_4 = \text{VI} - \text{VIII}$	

Figure 1. Arrangement of Column Scores to Secure Discrepancy Scores

According to the perceptual theory developed by Bills and others, it is theoretically impossible to have a negative  $d_1$ . However in this study, three negatives did occur. These must be considered either "lie scores" or from individuals who misunderstood the instructions for the instrument. For the sake of discussion,  $d_1$  is dubbed "ideal potential."

The  $d_2$  discrepancy score is the difference between how the individual thinks his peers presently view the program (Column IV) and how the individual presently views the program (Column I). As in the case of  $d_1$  it is necessary to seek meaning for the  $d_2$  score by looking at the extreme scores. Then those scores which are not extreme scores manifest varying degrees of the characteristics defined by the extremes. If an individual manifests a high negative  $d_2$ , this indicates



that he has a high actual perception of the program but feels that others do not perceive the program as highly as he does. He is saying, "I recognize the value of the audiovisual program but others do not." This situation would tend to make the individual complacent and satisfied with his view of the audiovisual program. He might, however, depending on circumstances and the degree of the negative  $d_2$ , make some efforts to help others elevate their view of the program.

If an individual manifests a high positive  $d_2$ , it indicates that he holds a low perception of the program while feeling that others hold a higher perception of the program than he does. He is saying, "I do not see value in the audiovisual program but many of my peers value it highly." For the sake of discussion,  $d_2$  is dubbed "self-other actual" perception. This situation should tend to make the individual dissatisfied with his own perception and could result in re-evaluation and subsequent change of the perception. The individual might conceivably copy the behavior of others freely because of this perception. Audiovisual use on this basis is likely to be poorly thought through and quite ineffective. The alternative to change of perception here is rationalization of the difference. This rationalization could very well be reflected in a low  $d_1$ .

The individual with a low or zero  $d_2$  has the potential for being a thoughtful and effective user of audiovisual media. He is not bound by the complacency and self-satisfaction

of the high negative  $d_2$  nor is he moved by a high positive  $d_2$  to make random use of the media.

The  $d_3$  and  $d_4$  discrepancy scores are not treated in detail in the report of this study. A brief review of literature on the self-concept and the other concept revealed no theory which would prove helpful in understanding the meaning of these two dimensions. It is, therefore, necessary to first develop meaning and understanding for the  $d_1$  and  $d_2$  scores. For instance, it is impossible to develop meaning of the  $d_4$  (Perception of Others Actual versus Perception of Others Ideal) until  $d_1$  (Actual Perception for Self versus Ideal Perception for Self) has been explored and studied. There is much room in these two dimensions for further study and research.

Table III presents the range and mean for each discrepancy score for the 47 subjects.

Columns II and V were excluded from this treatment of the data. These columns were utilized extensively in attempting to develop a composite perceptual pattern for each school. The unsuccessful nature of this effort is discussed in Chapter VI.

## II. PERFORMANCE STATEMENT GROUPING

Each subject had provided a performance statement on the interview. The subjects were arranged in rank order and the middle 17 subjects (36%) were removed to define more

TABLE III  
DERIVATIONS, RANGES, AND MEANS FOR THE  
FOUR DISCREPANCY SCORES

Discrepancy Score	Difference Between	Range	Mean	Columns
d <sub>1</sub>	Actual and ideal perceptions for self	(-3)-54	19.76	III-I
d <sub>2</sub>	Actual perception for self and actual for others	(-27)-20	15.30	IV-I
d <sub>3</sub>	Actual and ideal perceptions for others	0-51	21.98	VI-IV
d <sub>4</sub>	Ideal for self and ideal for others	(-34)-19	- 3.98	VI-III

clearly the high and low performance statements. Table IV is a summary of the data obtained by this grouping.

In this table the range and mean are provided for both high and low groups under the appropriate designation. It should be explained that a high score indicates a low performance statement and a low score indicates a high performance statement. In addition to the means of the four "d" scores, the table summarizes the subjects' perceptions of availability and the schools represented in each category.

There seems to be a difference in the means of the d<sub>1</sub>'s when the subjects are grouped high and low on performance. Those subjects in the high group had a mean d<sub>1</sub> of 22.15 as compared to a mean d<sub>1</sub> of 16.71 for the subjects grouped low

TABLE IV

SUMMARY OF DATA OBTAINED\* WHEN THE SUBJECTS WERE  
GROUPED BY PERFORMANCE STATEMENT

Performance	d1	d2	d3	d4	Availability	Schools			
						A	B	C	D
High 5-7 Mean 6.38	22.15	- 3.15	19.62	-5.69	Yes 7 No 6	3	4	4	2
Low 10-12 Mean 10.36	16.71	-10.71	17.57	-7.86	Yes 8 No 6	5	1	5	3

\*For "d" scores means are shown.

on the performance statement. This means that those subjects reporting a high performance statement also reported a high discrepancy between their actual and ideal perceptions of the audiovisual program. Those subjects reporting a low performance statement also reported a low discrepancy between actual and ideal.

There seems to be a similar difference for the means of the  $d_2$ 's. The subjects who provided a high performance statement had a mean  $d_2$  of -3.15 while those who had a low performance statement had a mean  $d_2$  of -10.71. This indicates that those who reported a high performance level viewed the program with more favor than they felt their peers did. Those who reported a low performance level viewed the program with much more favor than they felt their peers held.

When their view of availability of materials was checked in this grouping of scores, there appeared to be no difference in the perception of availability held by the two groups. The  $d_3$  and  $d_4$  means did not provide sufficient differences to yield meaningful comparisons.

It is noted that both  $d_2$  scores were negative. Since there is a difference between them, the question can be asked if all positive  $d_2$ 's were gathered and analyzed in terms of performance, would their mean performance statement be even higher. Seven subjects were found to have positive  $d_2$ 's with an average  $d_2$  of 10.28. The mean performance statement for these seven subjects was 8. This does not vary appreciably



from the total mean for performance ( $\bar{X} = 8.48$ ). For such a comparison of  $d_2$  scores to be meaningful more positive  $d_2$ 's would be necessary.

### III. AVAILABILITY STATEMENT GROUPING

Each subject had provided a "yes" or "no" answer to the question, "Are these materials always available when you want them?" The subjects were grouped on the basis of their availability statement. Table V is a summary of the data obtained by this grouping. Means are shown for the four "d" scores and the performance statement. Of the 47 subjects who reported on perception of availability, 25 reported "Yes" and 22 reported "No." Therefore, the means will not suffer from one "N" being substantially smaller than the other.

There seemed to be no appreciable difference on the  $d_1$  between the "No" and "Yes" perception of availability. The individuals answering "No" had a mean  $d_1$  of 20.55, while those answering "Yes" had a mean  $d_1$  of 19.08. This raises further doubts about the usefulness of the perception of availability. The dilemma would arise if performance and availability both seemed to have some relationship to the  $d_1$  score but showed no relationship to each other. However, the situation was that  $d_1$  seemed to have a relationship to performance but not to the perception of availability, nor do performance and availability reveal any relationship to each other. This presents a rather clear suggestion that

TABLE V  
SUMMARY OF DATA OBTAINED\* WHEN THE SUBJECTS WERE  
GROUPED BY AVAILABILITY STATEMENT

Performance	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	Performance	Schools		
						A	B	C D
Yes (n=25)	19.08	-3.56	19.16	-5.32	8.38	8	2	13 2
No (n=22)	20.55	-7.27	25.18	-2.45	8.60	5	8	1 8

\*For "d" scores and performance statement, means are shown.



the perception of availability is not a key factor in the individuals' perceptions of the audiovisual program.

There were three negative  $d_1$  scores. All three of these perceived the materials as not being available. This perception is consistent with the three individuals' lack of ideal potential.

The very dilemma described above as not occurring for the  $d_1$  score does occur for the  $d_2$  score. Those teachers reporting "Yes" on perception of availability felt that they had a slightly higher perception of the program than their peers. Teachers reporting "No" on perception of availability felt that they had a much higher perception of the program than their peers. There is inconsistency here which casts further doubt on the utility of the perception of availability. Performance and availability appear to lack correlation. The  $d_2$  scores seem to bear some degree of relationship to both performance and availability. If the teachers who answered "Yes" to availability had the higher perception of the program, there might be basis for analysis. However, just the reverse occurred which presents a situation into which little, if any, meaning can be projected. For these reasons it is concluded that in this study the perception of availability was not a significant factor in determining discrepancy scores or the statement of performance.

For the  $d_3$  means there does appear to be a difference. This, coupled with the lack of difference for  $d_3$  on the

performance suggests that the  $d_3$  availability possibility bears further investigation. The  $d_4$  score shows little or no difference on the availability division of the scores.

Here again there was an opportunity to check the relationship between performance statement and availability perception. There appeared to be no relationship between the two. Those reporting "Yes" on availability had a mean performance statement of 8.38 while those reporting "No" on availability had a mean statement of 8.60. This finding is consistent with that reported in the section on "The Performance Statement."

#### IV. LOW "d" SCORES

As explained earlier, low  $d_1$  and  $d_2$  scores have differing and important meanings. A low or zero  $d_1$  means that the individual has little or no "ideal potential." This means that their ideal perception is sufficiently similar to their actual perception to preclude room for growth or development. Thus in helping such individuals the first task is to expand their ideal perception to provide the necessary room for improvement.

A low  $d_2$  score means that an individual does not perceive an appreciable difference between his perception of the program and that of his peers. This frees the individual to make thoughtful and knowledgeable choices concerning his own use of the media available, in this case from the central audiovisual service.

In order to observe low  $d_1$ 's an arbitrary cutoff point was selected at +5. This seemed reasonable in the light of a range of 1-54 for positive  $d_1$ 's. All  $d_1$  scores +5 and below were examined for similar characteristics. This data is provided in Table VI. Three negative  $d_1$ 's occurred, although the Bills' theory does not provide for negative  $d_1$ 's.

Low  $d$  scores result from two similar scores whether they be high, low, or in between. In order to examine the column scores for high or low values the data in Table VI is ranked from high to low by column scores, with Column III as the ranking score. There were not sufficient scores to group them into separate high and low categories. Of the five low  $d_1$  scores, four resulted from high scores on Columns I and III and only one resulted from low scores on the two columns. A comparison of these teachers on performance revealed no significant difference from the total mean performance statement. On availability there were two "No" and three "Yes" responses. Thus there was no unanimity or common response on availability. The mean  $d_2$  for these five individuals was -13.63. This suggests that people with a low ideal potential have a substantially higher view of the program than they think their peers have. These two, low  $d_1$  and high negative  $d_2$ , may work together being reflected in average or below performance and complacency about that level of performance. The size of this sample is adequate for suggestion only. A more definitive answer would require a sample selected specifically for the purpose.

TABLE VI  
EXAMINATION OF LOW AND NEGATIVE\*  $d_1$  SCORES

$d_1$	Column III I		Performance	Availability	$d_2$
5	103	98	11	No	-21
3	100	97	9	No	-21
3	95	92	9	Yes	- 4
4	94	90	5	Yes	-13
1	68	67	9	Yes	- 7
			$X = 8.60$		$X = -13.63$
-3*	96	99	10	No	-27
-5*	92	97	7	No	- 7
-9*	83	92	10	No	- 9

\*Negatives are theoretically not possible.

For the examination of low scores for  $d_2$  arbitrary cutoff points were chosen from +5 to -5. Thus all scores between and including +5 and -5 were included. This choice provided 18 subjects with low  $d_2$  scores. With this number it was possible to secure a group with high column scores and a group with low column scores. In order to better define the extremes it was decided to remove the middle one-third of these 18 subjects when ranked on the basis of the Column IV scores. This would require the removal of six subjects.

Five subjects were finally removed in order to avoid the arbitrary casting out of one of a pair of subjects with identical Column IV scores. Table VII is the resulting table after the removal of the center five scores.

When the high and low column score groups are compared on performance, there seems to be little difference since the high-high group had a mean performance of 8 and the low-low group had a mean performance of 8.66. The overall performance statement mean was 8.48.

There does seem to be a difference between the two groups in their perception of availability. The low  $d_2$ 's resulting from high column scores were accompanied by more positive perceptions of availability (Yes 4, No 2). The low  $d_2$ 's resulting from low column scores were accompanied by almost all negative perceptions of availability (Yes 1, No 6). This is consistent with a lower overall view of the program, in these cases for both self and others.

There also seems to be an observable difference between the two groups on their  $d_1$  scores. The low  $d_2$ 's resulting from high column scores had a mean  $d_1$  of 22.16. The low  $d_2$ 's resulting from low column scores had a mean  $d_1$  of 35.43. This means that both groups have ideal potential. It would appear that the difference here might be sufficiently great for the larger of the two ideal potentials to be an unrealistic one and, hence, to have discouraging effect. The overall mean for  $d_1$  scores was 19.76. It was mentioned earlier that the  $d_1$  needed to be sufficiently large to permit room

TABLE VII  
 LOW  $d_2$  SCORES GROUPED INTO HIGH AND  
 LOW CONTRIBUTING SCORES

$d_2$	Column Scores		Performance	Availability	$d_1$
IV	I				
High					
0	110	110	6	Yes	22
-4	109	113	7	Yes	19
1	105	106	10	No	18
0	103	103	9	No	24
-3	97	100	8	Yes	28
5	97	92	-*	Yes	22
			$\bar{X} = 8$	Yes 4 No 2	$\bar{X} = 22.16$
Low					
3	81	78	-*	No	26
4	81	77	7	Yes	36
-2	80	82	10	No	36
0	68	68	8	No	21
-3	67	70	6	No	50
-4	66	70	9	No	45
0	60	60	12	No	34
			$\bar{X} = 8.66$	Yes 1 No 6	$\bar{X} = 35.43$

\*Principal, no performance statement available.

for growth and improvement. With an average  $d_1$  of 22.16 (only one of the six  $d_1$ 's was below 19.76) there should be sufficient room for the improvement and yet the score is not an extreme one so as to evidence an unrealistic ideal. Thus a  $d_1$  of 22.16 seems to fit logically with the group who had high column scores.

The  $d_2$ 's which resulted from low column scores may very well have  $d_1$ 's which are too large, with an unrealistic ideal. This might very well have resulted in their rationalizing that the materials were not available.

Table VII makes it apparent that one should not talk about low discrepancy scores without defining the nature of the scores which resulted in the low "d." There is a basic difference between low d's resulting from two high column scores and those resulting from two low column scores and there are apparent differences between these two categories on their statement of availability and their d's. This whole area bears further investigation.

#### The Four Schools

The method of selection of the four schools was reported in Chapter III along with some descriptive data for each school. This rationale had greater meaning for the original avenues of investigation. These unfruitful avenues of investigation are reported at the end of this chapter. However, the criteria for selection and the descriptive data are useful here in viewing the discrepancy scores for the four schools.

The discrepancy score data for the schools is summarized in Table VIII. It is noteworthy that on discrepancy scores  $d_1$ ,  $d_2$ , and  $d_3$  the schools all ranked the same. That is, School A was lowest on all three scores, School B highest, School C high, and School D low. On the  $d_4$  score the highest and lowest coincided (School A lowest and School B highest) but the high and low ranking schools interchanged (School C was low and School D was high).

Out of curiosity rather than necessity, several simple rank order correlations were computed. This was done to see if the ranking of the schools and certain scores on data had any correlation. A rank order correlation, by schools, was computed between performance and availability. This correlation was found to be non-existent ( $r_s = -.05$ ). A rank order correlation between the  $d_1$  score and availability was found to be extremely low ( $r_s = -.15$ ). The only correlation of significant size was that between the  $d_1$  score and performance ( $r_s = -.80$ ). Since the ranking of the schools is the same on the first three discrepancy scores, all three ( $d_1$ ,  $d_2$ , and  $d_3$ ) have the same correlation with the mean performance statements. This aids in understanding the usefulness of the mean performance statement since the relationship was neither a perfect direct or inverse fit.

The remainder of this section will summarize and analyze the information and discrepancy scores for the four schools.



TABLE VIII

SUMMARY OF DATA OBTAINED\* WHEN THE SUBJECTS  
WERE GROUPED BY SCHOOL

School	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	Performance	Availability
A n = 13	11.62 (lowest)	-10.85 (lowest)	13.77 (lowest)	-8.54 (lowest)	8.92 (high)	Yes 8 No 5
B n = 10	31.90 (highest)	3.0 (highest)	38.2 (highest)	5.10 (highest)	7.67 (lowest)	Yes 2 No 8
C n = 14	22.93 (high)	- 3.64 (high)	20.14 (high)	-6.71 (low)	8.23 (low)	Yes 13 No 1
D n = 10	13.8 (low)	- 8.7 (low)	19.2 (low)	-3.3 (high)	9.0 (highest)	Yes 2 No 8

\*For "d" scores and the performance statement means are shown.

School A. School A was originally characterized as having frequent and effective use. The performance statements in Table VIII placed it second highest in the ranking. In Chapter III the average use per teacher also placed it second highest in frequency of use.

The faculty of School A were reported in Chapter III as being "mature, experience, well trained" and as having "worked together long enough for good rapport to be expected." School A had the lowest entries on all four discrepancy scores. Over 60 per cent of the teachers perceived the materials as being available when they wanted them. The principal felt that the level of use was satisfactory.

Although the  $d_1$  for School A was the lowest of the four schools, it was not so low as to preclude some growth and improvement. The fact that this school had the lowest  $d_2$  (-10.85) suggests that the teachers felt that they had a higher perception of the program than did their peers.

This school can be said to have a desirable level of use, reasonable perception of availability, and sufficient room for growth and improvement. The  $d_2$  score is the highest  $d_2$  and the only positive  $d_2$  among the four schools. However, it is sufficiently close to zero to be desirable in terms of the ability to make knowledgeable and thoughtful selections without the factors mentioned earlier which can be introduced by high positive or negative  $d_2$ 's. Based on this data, School A appeared to be in a very desirable position with respect to its audiovisual program and utilization of modern media.

School B. School B was originally characterized as having infrequent and effective use. The performance statements in Table VIII placed it as the lowest of the four schools. The average use per teacher in Chapter III placed it as second lowest in frequent of use.

The faculty of School B were described in Chapter III as follows: "mature, experienced, well trained group of teachers (fewer had had a large number of methods courses) and had worked together for some time." School B had the highest scores on all four discrepancies. The materials were perceived as not available by 80 per cent of the teachers. The principal felt that there was a need for greater use in her school.

School B had the only positive discrepancy scores for  $d_2$  and  $d_4$ . Thus, School B was the only school which felt that their peers perceived the proper perception of the program higher than they did themselves. The  $d_1$  for this school may be sufficiently high as to result in discouragement. However, there are individuals in the school who have more realistic  $d_1$ 's.

This school seemed to be in need of assistance before improvement in perception and behavior could take place.

School C. School C was originally characterized as having frequent but ineffective use. The performance statements in Chapter III placed it as second lowest in this column. The average use per teacher was reported in Chapter

III as the highest of the four schools. If School D had not had a mean performance statement that disagreed completely with the data from the supervisor's office, School C would have been placed second highest.

The teachers in School C were described in Chapter III as a "mature, experienced, well trained group of teachers who had not worked together for a long period of time, and who were still in the process of developing rapport and understanding. School C had the second highest scores on  $d_1$ ,  $d_2$ , and  $d_3$ . Almost all of the teachers perceived the materials as being available (Yes 13, No 1).

This school had a  $d_1$  which was slightly higher than the overall average thus permitting considerable growth and improvement without an unrealistic idealization to discourage the teachers. The  $d_2$  of -3.64 is the second highest of the four schools but is sufficiently close to zero so that there is not a disparate difference between the actual perception of the program for self and others. As outlined earlier, this low or zero  $d_2$  can be a desirable condition for individuals and may be desirable for schools also.

In summary, it can be stated that this school is in a desirable condition to improve its use of the audiovisual program. The materials are perceived as available, there is sufficient ideal potential to permit improvement, and the  $d_2$  is sufficiently low to permit fair and unbiased selection.

School D. School D was originally characterized as having infrequent and ineffective use. The performance statements as shown in Table VIII placed it as highest. It should be remembered that the original assignment in Chapter III, which placed it as lowest in average use per teacher, was based on the circulation record from the central office. Therefore, the performance statement appears to be a completely inaccurate assessment by the teachers of their performance.

The faculty in School D were described in Chapter III thusly: "This is a staff which does not quite reflect the degree of training as in the other schools. They are mature and experienced and most of them had worked together for several years." There were other factors which hinted at a low degree of integration and rapport among this group. They were scattered throughout a junior high building. It was at School D that people refused to complete the perceptual instrument (the principal was one of these) and one teacher firmly objected to being interviewed. The principalship was a part-time assignment, her time being shared with responsibilities for junior high school guidance.

The materials were perceived as not available by 80 per cent of the teachers. This further supports the inaccuracy of the mean performance statement. The principal felt unable to generalize about her teachers but felt each one was an individual. This is a valid position; however, the other three

principals felt able to make some large overall generalizations about their teachers. This further supports the suspected low integration and rapport.

The  $d_1$  was below average but not so low as to rule out completely the possibility of improvement. However, a higher  $d_1$  might be more desirable. The  $d_2$  was sufficiently large (-8.7) as to suggest that their own view of the program was higher than that imputed to their peers. This could tend to maintain the status quo.

This school seemed in need of leadership and assistance to first improve its perceptions and to subsequently improve its use of the audiovisual program. Had this study been able to report on the quality of use, it might have shed more light on implications for this group particularly.

It would seem that efforts to use these discrepancy scores and the other information to characterize schools in terms of a common pattern proved ineffective and questionable at best. It is apparent that easy generalizations based on the  $d$  scores, even when there is the unique degree of ranking agreement which occurred in this case, are not possible.

#### The Principals' Perceptions

A search was made of the interviews of the four principals to uncover statements which would be indicative of the principal's role as a leader or authority figure in the audiovisual program in her building. In the interviews the teachers in all schools, without exception, reported that

the principal encouraged the use of audiovisual materials.

It was unfortunate that one principal (School D) declined the completion of the second portion of the perceptual instrument. This meant that discrepancy scores were not available for this one principal. The other three principals all had low  $d_2$ 's (Principal A,  $d_2 = -4$ ; Principal B,  $d_2 = 3$ ; Principal C,  $d_2 = 5$ ) and they all had  $d_1$ 's which permitted room for improvement but were not unrealistic. Three principals perceived the materials as being available when needed (A, D, and D).

A brief summary of each principal's view of the program follows:

School A. This principal had a positive view of the program in her building. She felt it was adequate and that the mechanics (both internally and externally) were operating satisfactorily. It would appear that she had communicated her satisfaction to her teachers. The school had a high performance statement and a  $d_1$  discrepancy which suggested potential for growth and improvement. Her assessment of the program was fairly accurate. She said, "The teachers in this building use all resources available for the presentation of the richest learning experiences." Her satisfaction was a little too well established. This seems to be reflected in the high  $d_2$  score (-10.85) whereby teachers felt that they had a higher perception of the program than their peers.

The principal's satisfaction and complacency seemed to be shared by the staff.

School B. This principal was quite dissatisfied with the program. She felt the materials were not always available when they were needed. She further felt that there should have been in-service training activities emanating from the central office. She expressed a lack of faith in the ability of some of her teachers to use materials effectively. She felt it necessary to deny equipment to teachers who had not been trained to make proper use of equipment and materials.

She felt that the materials available and that the mechanics of distribution were working satisfactorily. She felt it necessary to make excuses for her teachers as to why they did not make "better use" of the materials. She reported the need for improved use in her school but also said, "I do not see any new techniques which need to be introduced." It was felt that this attitude on behalf of the principal could be a limiting factor in the use of audiovisual materials. This school had the lowest use and the highest discrepancy scores. The large mean  $d_1$  suggests that the teachers idealized far above their actual perceptions of the program. The positive  $d_2$  suggests that they felt others had a more positive view of the program than they did. The principal's  $d_2$  coincides with the mean  $d_2$  for the school. The principal's  $d_1$  score was the highest of the three principals.



School C. This principal had a positive view of the program. She saw considerable potential in her own building for increased and improved use. She felt that her teachers had views similar to hers. She further felt that they were competent to improve and she expected improvement. She indicated the desire to facilitate and implement in any way possible. Her  $d_1$  was almost congruent with the mean  $d_1$  for her school (Principal 22, mean  $d_1$ , 22.93). The principal had a positive  $d_2$  as did the school. The school seemed to reflect the perceptions of the principal.

School D. This principal felt that the city-wide program was satisfactory and felt the materials were available when needed. She, however, declined on several occasions to generalize about the program in her building. She felt this varied with the individual. She felt that she did not have the time to provide leadership. The faculty seemed to be unintegrated with a minimum of closeness. The school reported the highest performance. However, the validity of this report has been substantially discounted. The  $d_1$  and  $d_2$  scores were low. On availability 80 per cent of the teachers viewed the materials as not available. The lack of integration, low ideal potential, and high negative self-other score all seemed to be consistent with the principal's lack of leadership.

In each of these schools, the role of the principal appeared important in the building perception of the audio-visual program. In each school the perceptions of the principal seemed to set the tone and be in general agreement with the averages developed. The next logical extension of this premise would be an objective check and comparison on quantity and quality of use.

## CHAPTER VI

### SUMMARY AND CONCLUSIONS

#### I. SUMMARY OF THE METHOD

The study began with the presentation of four problems.

They were:

1. The construction of an index of audiovisual values.
2. Exploration of the extent to which teachers in an individual school exhibit common perceptions about the program, thus permitting the assignment of a perceptual pattern to an individual school.
3. Measurement of the individual's level of behavior with respect to instructional materials (e. g. the extent and nature of use made).
4. Exploration of the relationship between a teacher's perception of availability of materials and his behavior.

The study consisted of two major parts: the construction and administration of an index to provide perceptual measures and the conducting of interviews intended to correlate with the perceptual data. The perceptual instrument consisted of 33 items characterizing the audiovisual program. Each subject responded to these items on six scales:

- Scale 1. Self-concept of Program
- Scale 2. Self-acceptance of Program
- Scale 3. Self-idealization of Program
- Scale 4. Peer-concept of Program
- Scale 5. Peer-acceptance of Program
- Scale 6. Peer-idealization of Program

An extension of Bill's perceptual theory was employed to develop the above indices. The theory provides a format for getting at perceptions of individuals with respect to the audiovisual program and the value they attach to the program as well as the value held by others as they conceive them. Since the study undertook to explore the significance of such perceptions upon the development and effectiveness of audiovisual programs, Bill's theoretical construct was regarded as an appropriate base for the construction of a useful index. As indicated later, it proved to be useful in getting at individual measures but not for group measures.

Bill's instrumentation of perceptual theory has been extended by Hengst<sup>4</sup> and others to derive discrepancy scores between selected perception scales on the instrument. Bill's theory does not embrace the application of discrepancy scores. It provides guidance in the analysis of 3 such

---

<sup>4</sup>Herbert R. Hengst, "A Measure of Propensity-to-change in Selected Liberal Arts Colleges in the North Central Association of Colleges and Secondary Schools" (Unpublished Doctoral thesis, Michigan State University, East Lansing, 1960).

scores but not specific meaning for their interpretation. The four discrepancy scores developed in this study were derived as follows:

<u>Discrepancy</u>	<u>Columns</u>	<u>Difference Between</u>
$d_1$	III - I	Ideal and actual perceptions for self.
$d_2$	IV - I	Actual for others and actual for self.
$d_3$	VI - IV	Ideal and actual perceptions for others.
$d_4$	VI - III	Ideal for others and ideal for self.

The study focused upon  $d_1$  (discrepancy between ideal and actual perceptions) and  $d_2$  (discrepancy between actual perception for others and self), perception of availability, statement of performance, and the possible relationships among these factors.

For the six scales on the perceptual instrument, reliability was .90 or higher. Because an attempt was made to develop group measures between the schools, homogeneity of variance was also computed. The homogeneity of variance was found to be at the .05 level of confidence or higher for five of the six scales. The remaining scale had a confidence level of .06.

In terms of the initial problems studied, findings were as follows: (Conclusions and implications are discussed in the next section).

1. It is possible to construct an Index of Audio-visual Values which will provide data concerning how teachers perceive the audiovisual program.

2. The index did not prove successful for the establishment of a composite or group measure. Teachers in the individual schools did not manifest sufficiently similar scores on the perceptual scales to permit the assignment of a pattern or score which would be truly representative of the total group.
3. When, as in this case, the nature of use is conceived as something more sophisticated than quantity of use, the techniques used here are not adequate.
4. This study discovered no relationship between stated performance and the perception of availability of materials.

## II. CONCLUSIONS

Conclusions and implications of the study are as follows:

1. Teachers who hold a high concept of their own performance with modern media are more likely to increase and improve their use of modern media than those teachers who have a low concept of their own performance with modern media. When teachers were grouped into high and low groups on performance, teachers with a high performance concept had a higher concept of the

potential of an ideal audiovisual program for instruction than teachers with a low performance concept.

2. Teachers with a high concept of their own performance with modern media are more likely to learn from their peers and emulate their behavior than are teachers who have a low self performance concept.

Teachers with a high performance concept felt that their peers viewed the audiovisual program more favorably than they did themselves. There was, therefore, a greater tendency for them to borrow materials from and utilize techniques of their peers.

3. Teachers who perceive the audiovisual materials as not being available are less likely to learn from their peers and emulate their behavior with respect to modern media than are teachers who perceive the materials as being readily available.

Teachers who reported "No" on perception of availability felt that they had a much higher perception of the program than their peers.

4. Teachers who perceive materials as being readily available do not share a common potential to act upon that perception.

When teachers were grouped by "yes" and "no" on perceptions of availability of materials, both groups had similar scores on their perceptions of the nature of an ideal program. Thus availability in itself does not appear to be a significant factor in growth potential.

5. Teacher's perceptions of the availability of materials do not appear to be capable of generalization because of their tendency to think primarily in terms of specific materials and specific sources of materials. Perceptions of availability of materials tended to be directed specifically toward a particular source and a specific type of material even though subjects were asked to answer in terms of the various materials provided by the central audiovisual office.
6. There is no apparent relationship between a teacher's concept of his own performance and his perception of the availability of audiovisual materials. Any effort to infer one from the other would be in error. When responses were grouped in terms of a teacher's performance concepts, there was no difference between the groups on perception of



availability. When they were grouped in terms of perception of availability there was no difference between the groups on performance concept. When grouped by schools, the data showed no correlation between stated performance and the perception of availability.

7. The use of perceptual patterns, as developed by Robert E. Bills, to establish an institutional or composite pattern of a school faculty's perception of an audiovisual program, as attempted in this study, is not a fruitful approach. In attempts to use the algebraic symbols (++ , +-, -+, --) employed by Bills to describe individual perceptions, the range of scores was too great to establish representative groups and cut off points were impossible to assign. Further, the range of the above scale applications in each school made measures of central tendency unusable for comparative purposes.

### III. RECOMMENDATIONS FOR FURTHER STUDY

There is a need for audiovisual administrators to better understand the factors which cause teachers to hold favorable and unfavorable views of the audiovisual program.

The original hypothesis in this study, that a school could be considered to have an identifiable institutional perception of the audiovisual program, proved unworkable.

When the emphasis in reporting the data was changed, it was discovered that there were some places where the amount of data was statistically inadequate to support conclusion. They were sufficient to suggest recommendations for useful followup studies.

The following recommendations are considered avenues worthy of attention in the further use of perceptual discrepancy scores in attempting to understand teachers' perceptions and attendant behavior with respect to audiovisual media.

1. There is a need for a sufficiently large sample of teachers so that certain selected discrepancy patterns can have more teachers fall into those categories. If the low  $d_1$  (discrepancy between ideal and actual perceptions) scores (0 to 5) and low  $d_2$  (discrepancy between actual perception for others and self) scores (-5 to +5) are to be studied in detail, the original base of data must be broadened to provide adequate numbers of subjects in each category.
2. It is recommended that the low discrepancy scores for differences between ideal and actual perceptions

and differences between actual perception for self and others to be studied in greater detail.

In this study one of the low discrepancy groupings (difference between actual perceptions for self and others) revealed no significant data until the discrepancy scores were separated into high and low contributing scores. In the writer's opinion, a teacher with a low discrepancy derived from two very high scale scores is perceiving quite differently from a teacher with a low discrepancy score derived from two very low scale scores.

Here, too, increased sample size would be helpful since the distribution of the low discrepancy scores into a high and low group provided only 6 subjects for the high group and 7 subjects for the low group.

3. To establish relationship between teacher perceptions and effectiveness of use, better means of measuring quality of use must be developed. Measures of quantity are fairly simple to develop but the self-perception approach on quality measurement, as attempted in this study, proved quite inadequate.

The measure of quality of an individual's use of modern educational media is a complex problem involving a variety of factors but a highly important one for solution. It would appear and still appears that the teacher's and his colleague's perceptions would be one important aspect of such a measure, but a more sophisticated means of development and application must be found than that used in this study.

4. There is a need to develop techniques for finding out how teachers value audiovisual programs, which are intended to serve them, and for determining the degree of the individual teacher's basic commitment to modern media.

The original idea which promoted this study was that the instrumentation which had been developed to utilize the perceptual theory of Robert E. Bills might yield a neat and compact method for studying the views of institutions and teachers. The two columns which were not used in receiving discrepancy scores (columns II and V) were originally thought to possess the potential for determining the value that teachers placed upon the program. However, in retrospect it was realized that they did not really go deeply into the

individual's basic motivation and commitment to modern media. A somewhat open-ended question on the interview left too much room for hedging and evasive answers. These techniques must be carefully structured for the individual to provide meaningful data.

5. If a study had available the information recommended above concerning quantity and quality of use, a detailed analysis of  $d_1$  scores (discrepancy between ideal and actual perceptions) would be useful. The purpose should be to determine the apparent effects of low, average and high  $d_1$ 's.
6. A future study using these perceptual discrepancies should attempt to characterize the pattern for the individual who has a high basic commitment to modern media and who uses them thoughtfully and skillfully. This study suggests that this individual may have an average  $d_1$  (neither extreme) and a low  $d_2$  score. The perceptual theory suggests that this may not be the teacher with the highest performance, due to the ability of the teacher to make an intelligent selection or rejection of materials in terms of their value to the content being studied.

This is an important recommendation but must follow others which prepare the ground work for such analysis.

7. A future study could examine the  $d_3$  score (discrepancy between ideal and actual for others) and  $d_4$  score (discrepancy between ideal for others and ideal for self) to determine their utility. They are subtle and complex dimensions and may have significant meaning.

#### IV. UNSUCCESSFUL METHODOLOGY AND ADDITIONAL DATA

This section is included in the belief that negative findings and unfruitful methods are sometimes as significant as more positive results. In this study one rather large avenue of data examination and reporting had to be abandoned. Explanation of the reasons for abandonment could be helpful to future investigators.

The Bills instrumentation of perceptual theory involves the assignment of an algebraic symbol (+ or -) to both one's self and other perceptions thus resulting in four so-called perceptual patterns (++ , +- , -+ , --). This technique was found to be fraught with problems since the assignment of the algebraic symbol requires the selection and justification of cutoff points. Individuals with scores which varied significantly from the mean could be treated easily. However, for those subjects whose scores fell near to the mean, either the cutoff points must be lowered or they must be discarded from the analysis. Basically, the theory does not provide for the question of differing degree or magnitude in the perceptual scores.

It also became apparent that columns II and V were dealing with the valuing of the perceptions of the 33 items and were in no way really tapping the individual's basic belief or motivation toward modern media.

When an effort was made to combine individual perceptions to derive an institutional pattern, the F tests and T tests for variability were not significant. Further reflection on this point resulted in the feeling that it is not possible to characterize one school as having a composite pattern. This was most clearly shown when an effort was made to derive the same institutional pattern from the interview data for comparative purposes. Here the attempts to assign a perceptual pattern to the institutions failed completely.

The use of a non-parametric correlation technique, the Contingency Coefficient, provided no significant results whatsoever.

In the Bills theory the difference between Column III and I (Ideal and Actual for Self) is considered to be a "Propensity to Change". Several questions in the interview were designed to check this dimension. These questions caused people to become evasive and to hedge on their answers. These interview questions proved to be a source of apprehension to a number of subjects. Thus, correlation and validation of the perceptual pattern and associated measures became unworkable.

Consultation with a research specialist revealed that the body of data gathered in this study could be examined in a variety of ways. The writer chose one of these possibilities for this study. This data will be available to anyone who wishes to conduct further analysis.

#### V. DISCUSSION: THE UTILITY OF PERCEPTUAL THEORY

Several problems which arose in the course of this study cause this writer to raise serious questions concerning the utility of Bill's perceptual theory in the kind of analysis conceived for this study. The first of these was the realization that the two scales designed to measure the value placed upon perceptions were not securing information about a subject's basic commitment to modern media. In the writer's opinion, the idea of an "audiovisual self" is too subtle a distinction for either present day perceptual theory or self theory.

The writer feels that further study of the discrepancy scores would have considerable worth. However, since the theory does not encompass this treatment of data it provides only a base for such investigation rather than overall direction

The theory recognizes reality as that which the individual perceives. However, in the study of modern media it is possible to compare an individual's perception of availability with what is really available. This kind of



comparison can have considerable meaning for an audiovisual director. Although in this study no relationship could be established between perception of availability and performance concept, it still seems reasonable to insist that a teacher must have an awareness of the materials and media available if he is to manifest patterns of use involving them.

## BIBLIOGRAPHY

- Bartlett, M. S. "The Use of Transformations," Biometrics, Vol. 3 (1947), p. 39.
- Berkeley, George. "Of the Principles of Human Knowledge," A New Theory of Vision and Other Writings of Berkeley. Part I. London: J. M Dent & Sons, Ltd., 1910.
- Bills, Robert E. "About People and Teaching," Bulletin of the Bureau of School Service, College of Education, Vol. 38 (December, 1955) University of Kentucky.
- \_\_\_\_\_. "Instruction Manual for Index of Adjustment Values." University of Kentucky, Lexington, Kentucky. Mimeographed.
- Crawford, Winnifred E. Counseling with Teachers Concerning Visual Education. New York: New York University, 1942.
- Encyclopedia Britannica. (1959), XIII, pp. 266-272.
- Hengst, Herbert R. "A Measure of Propensity-to-Change in Selected Liberal Arts Colleges in the North Central Association of Colleges and Secondary Schools." Unpublished Doctoral Thesis, Michigna State University, 1960.
- Hilgard, Ernest R. Theories of Learning. New York: Appleton-Century-Crofts, Inc., 1956.
- Hoyt, Cyril J. and Stunkard, C. L. "Estimation of Test Reliability for Unrestricted Item Scoring Methods," Education and Psychological Measurement, Vol. 12, No. 4 (1952), pp. 756-758.
- Hyer, Anna L. "A Study of Possible Deterrents to Use of Motion Pictures Within a School System Where Films and Facilities for Use Were Provided." Unpublished Doctoral Dissertation, Indiana University, Bloomington, 1952.
- Kant, Immanuel. "Critique of Pure Reason," Kant Presented by Julien Benda. New York: Longmans, Green and Co., 1940.

- Kelley, Earl C. Education for What Is Real. New York: Harper and Brothers, 1947.
- Kelley, Galen B. "An Analysis of Teachers' Attitudes Toward the Use of Audiovisual Materials." Unpublished Doctoral Dissertation, Boston University, 1959.
- \_\_\_\_\_. "A Study of Teachers' Attitudes Toward Audiovisual Materials," Education Screen and Audio-Visual Guide, Vol. 39 (March, 1960), pp. 119-121.
- Lecky, Prescott. Self-Consistency. New York: Island Press, 1945.
- Miller, Neal E. (ed.). Graphic Communication. Washington, D. C.: Department of Audiovisual Instruction, National Education Association, 1957.
- Nerden, Joseph T. "A Study of Factors Related to the Use of Motion Picture Film by Public School Teachers." Unpublished Doctor's thesis, Yale University, New Haven, 1954.
- Rogers, Carl. Client-Centered Therapy. Boston: Houghton-Mifflin Company, 1951.
- Snygg, Donald and Combs, Arthur W. Individual Behavior. New York: Harper and Brothers, 1949.
- \_\_\_\_\_. Individual Behavior. Rev. Ed. New York: Harper and Brothers, 1959.

APPENDIX A

INSTRUMENT MATERIALS

Instructions for Administration  
Sample of Pilot Instrument  
Sample of Final Instrument



# INSTRUCTIONS FOR ADMINISTRATION OF THE INDEX OF AUDIOVISUAL VALUES

## I. Points to be Covered in Introduction

- A. This research project is being conducted under the auspices of the Audiovisual Center at Michigan State University.
- B. The purpose of this study is not to evaluate the Audiovisual Program in the \_\_\_\_\_. This study could have been conducted in any school system with an active program. The purpose is to find out if this is an effective way to find out how teachers feel about the various aspects of an audiovisual program. (Read Paragraph at top of Page 1.)
- C. For this reason accurate responses are needed. All responses will be confidential. All reporting of data will be in terms of groups and institutions, not individuals.
- D. Your name is needed on the questionnaire since some of you may be contacted later for a brief interview. One question which is anonymous is being circulated separately.
- E. Have them count to be sure they all have pages 1 through 9.

## II. Instructions

- A. Read instructions on Page 2, referring to example on page 3.
- B. Point out that they are to work down the columns for the 33 items.
- C. The questionnaire is in two parts. When you have completed Part A, you will find the instructions to Part B on Page 6. Read them and do Part B. Since there are no average teachers in this group, the second part is a technique to get the feelings of the average teacher in your school. Other studies have shown this technique to be more effective than the well known numerical average for this purpose.
- D. There are some small corrections:  
 Page 1 -- (see copy) Check at least one if applicable.  
 Page 3 -- Column 1, response #4 add "of"  
 Page 6 -- 2nd paragraph, 2nd line, change "college" to "school."

## III. Things to Watch for:

- A. Frustration, prod them gently.
- B. Impossible answers (1 1 1). Try to help them see it, e. g. "Let's see what you have said."
- C. They can complete front page before or after body of instrument.
- D. Have principals identify themselves on the questionnaire.





# INDEX OF AUDIOVISUAL VALUES

Characteristic of the Program	Column I	Column II	Column III
	How much of the time do you believe each of the following characteristics of the audiovisual program in your school is adequate?	How do you feel about the adequacy of each of these characteristics of the audiovisual program in your school?	Ideally, how much of the time do you believe each of these characteristics should be adequate?
	<ol style="list-style-type: none"> <li>1. Seldom</li> <li>2. Occasionally</li> <li>3. About half of the time</li> <li>4. Good deal of the time</li> <li>5. Most of the time</li> </ol>	<ol style="list-style-type: none"> <li>1. Very much dislike</li> <li>2. Dislike</li> <li>3. Neither like nor dislike</li> <li>4. Like</li> <li>5. Very much like</li> </ol>	<ol style="list-style-type: none"> <li>1. Seldom</li> <li>2. Occasionally</li> <li>3. About half of the time</li> <li>4. Good deal of the time</li> <li>5. Most of the time</li> </ol>

## EXAMPLE: Use of Television

	4	4	5
1. Purposes of the program	_____	_____	_____
2. Consultant service	_____	_____	_____
3. Availability of materials when wanted	_____	_____	_____
4. Variety of films and filmstrips available	_____	_____	_____
5. Quality of films and filmstrips available	_____	_____	_____
6. Condition of films and filmstrips	_____	_____	_____

Characteristic of the Program	Column I		Column II		Column III	
	1. Seldom	2. Occasionally	3. About half of the time	4. Good deal of the time	5. Most of the time	
7. Available materials are closely related to the curriculum	_____	_____	_____	_____	_____	
8. Availability of information about films and filmstrips	_____	_____	_____	_____	_____	
9. Relations between teachers and audiovisual coordinator	_____	_____	_____	_____	_____	
10. Relations between teachers and audiovisual director	_____	_____	_____	_____	_____	
11. Provision for classroom projection (e.g., darkening facilities, ventilation, sound treatment, electrical outlets, etc.)	_____	_____	_____	_____	_____	
12. Provision for storage of materials and equipment	_____	_____	_____	_____	_____	
13. Provision for classroom tape recording	_____	_____	_____	_____	_____	
14. Availability of recorded tape materials	_____	_____	_____	_____	_____	



Page 3 -- Part I INDEX OF AUDIOVISUAL VALUES

	Column I	Column II	Column III
Characteristic of the Program	1. Seldom 2. Occasionally 3. About half of the time 4. Good deal of the time 5. Most of the time	1. Very much dislike 2. Dislike 3. Neither like nor dislike 4. Like 5. Very much like	1. Seldom 2. Occasionally 3. About half of the time 4. Good deal of the time 5. Most of the time
15. Opportunity to view or hear materials before classroom use	_____	_____	_____
16. Opportunities to learn about new materials and techniques (e.g., workshops, audiovisual courses, teachers' meetings, etc.)	_____	_____	_____
17. Availability of phonographs and tape recorders	_____	_____	_____
18. Availability of projection equipment (e.g., motion picture projectors, slide-filmstrip projector, opaque projector)	_____	_____	_____
19. Availability of films and filmstrips	_____	_____	_____
20. Use by teachers of an appropriate variety of materials	_____	_____	_____
21. Effective use of materials by teachers	_____	_____	_____

Characteristic of the Program	Column I		Column II		Column III	
	1. Seldom	2. Occasionally	3. About half of the time	4. Good deal of the time	5. Most of the time	
22. Value to the learner	_____	_____	_____	_____	_____	_____
23. Teachers' use of students in preparation of slides	_____	_____	_____	_____	_____	_____
24. Use by teachers of opportunities to view or hear materials before classroom use	_____	_____	_____	_____	_____	_____
25. Use by teachers of opportunities to learn about new materials and techniques	_____	_____	_____	_____	_____	_____
26. Teachers' use of phonographs and tape recorders	_____	_____	_____	_____	_____	_____
27. Teachers' use of projection equipment (e.g., motion picture projector, slide-film-strip projector, opaque projector)	_____	_____	_____	_____	_____	_____
28. Teachers' use of projected materials (e.g., films, slides, and filmstrips)	_____	_____	_____	_____	_____	_____

Characteristic of the Program	Column I					Column II					Column III				
	1. Seldom	2. Occasionally	3. About half of the time	4. Good deal of the time	5. Most of the time	1. Very much dislike	2. Dislike	3. Neither like nor dislike	4. Like	5. Very much like	1. Seldom	2. Occasionally	3. About half of the time	4. Good deal of the time	5. Most of the time
29. Condition of equipment	_____														
30. Opportunities to secure assistance in the use of audiovisual materials	_____														
31. Teachers' use of audio-visual coordinator	_____														
32. Teachers' use of audio-visual director	_____														
33. Teachers' use of materials' catalog	_____														
34. Listing of materials in curriculum guides	_____														

## INDEX OF AUDIOVISUAL VALUES

This study is concerned with understanding how teachers view audio-visual programs and their contribution to the learning environment. By completing this instrument you will be providing information which may very well help to improve audiovisual programs and their services to teachers in the public schools of Michigan.

All responses are in strictest confidence. Report of data is to be in terms of groups and institutions, not individuals. Thank you for your assistance.

Name: \_\_\_\_\_

School:

[illegible]

Undergraduate major:

Courses in teaching methods in undergraduate program:  
How many?

Course in audiovisual methods: (yes) (no)

Workshop in audiovisual methods: (yes) (no)

In-service training in audiovisual methods: (yes) (no)

Number of educators in immediate family: \_\_\_\_\_  
(Father, Mother, Brother, Sister, Other -- check one)

Type of Certificate held:

Present grade taught:

Number of years in this school: \_\_\_\_\_

As you see them, what are the major problems or shortcomings which need attention in the audiovisual program as it is now operating?

What are the strong points of the program?





## PART A--DIRECTIONS

On the following five pages is a list of 33 characteristics associated with the audiovisual program in your school. Please examine each characteristic as it applies to the audiovisual program in your school. Then do three things with each of the characteristics:

First, in column I, describe how the audiovisual program appears to be at this time in terms of these characteristics. To do so decide how much of the time each of the 33 characteristics appears to be adequate in your school. At the top of column I is a list of five possible responses. Choose the response which best describes how much of the time each characteristic is adequate in your school. Place the number (1, 2, 3, 4, 5) of the response which you have chosen in the blank opposite each characteristic.

Second, in column II, describe how you feel about the audiovisual program in your school as it appears to be at this time. To do so, decide how you feel about each of the 33 characteristics which you have described in column I. At the top of column II is a list of five possible responses. Choose the one response which best describes how you feel about each characteristic. Place the number (1, 2, 3, 4, 5) of the response which you have chosen in the blank opposite each characteristic.

Third, in column III, describe how you would like the audiovisual program in your school to be ideally. To do so, decide how much of the time each of the 33 characteristics should ideally be adequate in your school. At the top of column III is a list of five possible responses. Choose the response which best describes how much of the time each characteristic should ideally be adequate in your school. Place the number (1, 2, 3, 4, 5) of the response which you have chosen in the blank opposite each characteristic.



# PART A: INDEX OF AUDIOVISUAL VALUES

Characteristic of the Program	Column I	Column II	Column III
	How much of the time do you believe each of the following characteristics of the audiovisual program in your school is adequate?	How do you feel about the adequacy of each of these characteristics of the audiovisual program in your school?	Ideally, how much of the time to you believe each of these characteristics of the audiovisual program should be adequate?
	1. Seldom 2. Occasionally 3. About half of the time 4. Good deal of the time 5. Most of the time	1. Very much dislike 2. Dislike 3. Neither like nor dislike 4. Like 5. Very much like	1. Seldom 2. Occasionally 3. About half of the time 4. Good deal of the time 5. Most of the time
EXAMPLE: Use of television	4	4	5
1. Purposes of the program			
2. Arrival of materials when wanted			
3. Variety of films and filmstrips available			
4. Quality of films and filmstrips available			
5. Condition of films and filmstrips			
6. Available materials are closely related to the curriculum			

PART A -- Continued

Characteristic of the Program	Column I					Column II					Column III				
	1. Seldom	2. Occasionally	3. About half of the time	4. Good deal of the time	5. Most of the time	1. Very much dislike	2. Dislike	3. Neither like nor dislike	4. Like	5. Very much like	1. Seldom	2. Occasionally	3. About half of the time	4. Good deal of the time	5. Most of the time
7. Availability of information about films and filmstrips	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
8. Relations between teachers and audiovisual coordinator	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
9. Relations between teachers and audiovisual director	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
10. Provision for classroom projection (e.g., darkening facilities, ventilation, sound treatment, electrical outlets, etc.)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
11. Provision for storage of materials and equipment	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
12. Provision for classroom tape recording	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
13. Availability of recorded tape material	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
14. Opportunity to view or hear materials before classroom use	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

PART A -- Continued

Characteristic of the Program	Column I					Column II					Column III				
	1. Seldom	2. Occasionally	3. About half of the time	4. Good deal of the time	5. Most of the time	1. Very much dislike	2. Dislike	3. Neither like nor dislike	4. Like	5. Very much like	1. Seldom	2. Occasionally	3. About half of the time	4. Good deal of the time	5. Most of the time
15. Opportunities to learn about new materials and techniques (e.g., workshops, audiovisual courses, teachers' meetings, etc.)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
16. Availability of phonographs and tape recorders	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
17. Availability of projection equipment (e.g., motion picture projectors, slide-filmstrip projectors, opaque projector)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
18. Availability of films and filmstrips	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
19. Use by teachers of an appropriate variety of materials	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
20. Effective use of materials by teachers	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
21. Value to the learner	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

PART A -- Continued

	Column I	Column II	Column III
Characteristic of the Program	1. Seldom 2. Occasionally 3. About half of the time 4. Good deal of the time 5. Most of the time	1. Very much dislike 2. Dislike 3. Neither like nor dislike 4. Like 5. Very much like	1. Seldom 2. Occasionally 3. About half of the time 4. Good deal of the time 5. Most of the time
22. Teachers' use of students in preparation of slides	_____	_____	_____
23. Use by teachers of opportunities to view or hear materials before classroom use	_____	_____	_____
24. Use by teachers of opportunities to learn about new materials and techniques	_____	_____	_____
25. Teachers' use of phonographs and tape recorders	_____	_____	_____
26. Teacher's use of projection equipment (e.g., motion picture projector, slide-filmstrip projector, opaque projector)	_____	_____	_____
27. Teachers' use of projected materials (e.g., films, slides, and filmstrips)	_____	_____	_____

PART A -- Continued

	Column I	Column II	Column III
Characteristic of the Program	1. Seldom 2. Occasionally 3. About half of the time 4. Good deal of the time 5. Most of the time	1. Very much dislike 2. Dislike 3. Neither like nor dislike 4. Like 5. Very much like	1. Seldom 2. Occasionally 3. About half of the time 4. Good deal of the time 5. Most of the time
28. Condition of equipment	_____	_____	_____
29. Opportunities to secure assistance in use of audiovisual materials	_____	_____	_____
30. Teacher's use of audio-visual coordinator	_____	_____	_____
31. Teachers' use of audio-visual director	_____	_____	_____
32. Teachers' use of audio-visual catalog	_____	_____	_____
33. Listing of materials in curriculum guides	_____	_____	_____





## PART B--DIRECTIONS

In the following five pages, you can help us describe how the average person within your school feels about the audiovisual program.

In order to represent the views of the average person within the college, would you complete the following questionnaire as you think the average person in your own peer group would complete it for himself. In other words, complete the questionnaire as you think the average teacher in your school would fill it out.

Complete columns I, II, and III of the next five pages in the same manner in which you did yourself on the previous five pages.



# PART B: AUDIOVISUAL VALUES INDEX

To be completed as you believe the average person in your peer group would complete it for himself.

	Column I	Column II	Column III
Characteristic of the Program	How much of the time does the average person in your peer group believe each of the following characteristics of the audiovisual program is adequate?	How does the average person in your peer group feel about the adequacy of each of these characteristics of the audiovisual program?	Ideally, how much of the time does the average person believe each of the following characteristics of the audiovisual program should be adequate?
	1. Seldom 2. Occasionally 3. About half of the time 4. Good deal of the time 5. Most of the time	1. Very much dislike 2. Dislike 3. Neither like nor dislike 4. Like 5. Very much like	1. Seldom 2. Occasionally 3. About half of the time 4. Good deal of the time 5. Most of the time

1. Purposes of the program

2. Availability of materials when wanted

3. Variety of films and filmstrips available

4. Quality of films and filmstrips available

5. Condition of films and filmstrips

6. Available materials are closely related to the curriculum



PART B -- Continued

Characteristic of the Program	Column I		Column II		Column III	
	1. Seldom	2. Occasionally	3. About half of the time	4. Good deal of the time	5. Most of the time	
1. Availability of information about films and filmstrips	_____	_____	_____	_____	_____	_____
2. Relations between teachers and audiovisual coordinator	_____	_____	_____	_____	_____	_____
3. Relations between teachers and audiovisual director	_____	_____	_____	_____	_____	_____
4. Provision for classroom projection (e.g., darkening facilities, ventilation, sound treatment, electrical outlets, etc.)	_____	_____	_____	_____	_____	_____
5. Provision for storage of materials and equipment	_____	_____	_____	_____	_____	_____
6. Provision for classroom tape recording	_____	_____	_____	_____	_____	_____
7. Availability of recorded tape materials	_____	_____	_____	_____	_____	_____
8. Opportunity to view or hear materials before classroom use	_____	_____	_____	_____	_____	_____

PART B -- Continued

Characteristic of the Program	Column I		Column II		Column III	
	1. Seldom	2. Occasionally	3. About half of the time	4. Good deal of the time	5. Most of the time	
15. Opportunities to learn about new materials and techniques (e.g., work-shops, audiovisual courses, teachers meetings, etc.)	_____	_____	_____	_____	_____	_____
16. Availability of phonographs and tape recorders	_____	_____	_____	_____	_____	_____
17. Availability of projection equipment (e.g., motion picture projectors, slide-filmstrip projector, opaque projector)	_____	_____	_____	_____	_____	_____
18. Availability of films and filmstrips	_____	_____	_____	_____	_____	_____
19. Use by teachers of an appropriate variety of materials	_____	_____	_____	_____	_____	_____
20. Effective use of materials by teachers	_____	_____	_____	_____	_____	_____
21. Value to the learner	_____	_____	_____	_____	_____	_____



PART B -- Continued

Characteristic of the Program	Column I					Column II					Column III				
	1. Seldom	2. Occasionally	3. About half of the time	4. Good deal of the time	5. Most of the time	1. Very much dislike	2. Dislike	3. Neither like nor dislike	4. Like	5. Very much like	1. Seldom	2. Occasionally	3. About half of the time	4. Good deal of the time	5. Most of the time
22. Teacher's use of students in preparation of slides	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
23. Use by teachers of opportunities to view or hear materials before classroom use	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
24. Use by teachers of opportunities to learn about new materials and techniques	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
25. Teachers' use of phonographs and tape recorders	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
26. Teachers' use of projection equipment (e.g., motion picture projector, slide-filmstrip projector, opaque projector)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
27. Teachers' use of projected materials (e.g., films, slides, and filmstrips)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____





## PART B -- Continued

Characteristic of the Program	Column I					Column II					Column III				
	1. Seldom	2. Occasionally	3. About half of the time	4. Good deal of the time	5. Most of the time	1. Very much dislike	2. Dislike	3. Neither like nor dislike	4. Like	5. Very much like	1. Seldom	2. Occasionally	3. About half of the time	4. Good deal of the time	5. Most of the time
28. Condition of equipment	_____					_____					_____				
29. Opportunities to secure assistance in the use of audiovisual materials	_____					_____					_____				
30. Teachers' use of audio-visual coordinator	_____					_____					_____				
31. Teachers' use of audio-visual director	_____					_____					_____				
32. Teachers' use of materials catalog	_____					_____					_____				
33. Listing of materials in curriculum guides	_____					_____					_____				

APPENDIX B

INTERVIEW MATERIALS

Interview Instructions  
Interview Schedule



## INSTRUCTIONS FOR: AUDIOVISUAL INTERVIEW

1. In the \_\_\_\_\_ School System and, therefore, in this study the term Audiovisual Materials refers to films, filmstrips, and disc and tape recordings. Thus the program consists of the supplying of these materials, distribution of them and the provision of the necessary equipment and facilities for their use. This is a narrow meaning for the term Audiovisual Materials, but it is nevertheless the context within which the interview should operate. In most other school systems this term has a much broader meaning which includes other materials and services. These are available in \_\_\_\_\_ but from varying sources. In order to narrow the investigation this limited meaning of the term has been accepted for the study.

Should the interviewee get way off the track you might point this out. However, if he varies from this context slightly, it is understandable, due to the broader meaning usually understood for the term. In such a case, do not make an issue of the departure.

2. It can be pointed out that the purpose of the study is not to study individuals, schools, or the \_\_\_\_\_ System for purposes of evaluation. The interest here is to study methods of finding out teachers' attitudes toward such programs. All reporting will be in terms of groups or institutions, both of which will remain anonymous as will individual identities.

Those questions which appear quite personal have, as their purpose, the defining of characteristics of the program only. You will notice some concern with self-other patterns here. These are to be generalized to institutions in the reporting.

3. Either read the opening paragraphs or cover the same points in your own words. You may find the above information helpful in introducing the interview, or in answering questions during or after the interview. You will interview only the teachers. The principals will be interviewed by someone else.
4. Try for specific answers (e. g., No or Yes, More or Less). Use answers such as (Sometimes or about the same only as a last resort). The real import of the interview will lie in the commentary which is evoked after the committal. Prod them gently but firmly. Do not put words in their

mouths. Encourage them to amplify any answer they wish to make more clear. Go for "Quotes." If possible, verbatim recording is desirable. However, there is no need for the interviewee to go on indefinitely. This is pretty much in your hands. Short, succinct answers which are well thought through will give the best results. Push for this type of response if you can get it. If they become verbose don't try to get everything, but get the salient thoughts.

5. If you need additional room for recording of responses write on back of sheet, labeling the response clearly.
6. Keep the interview to 30 minutes, or less, if possible. This will be necessary where subsequent interviews are scheduled.
7. After the interviewee has left, write on the interview form the identifying code which accompanies the name on the list. This number will be a letter and a number, such as: B1, H6, D13, etc.



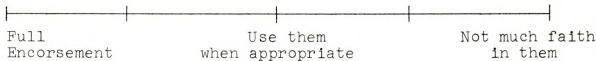
## AUDIOVISUAL INTERVIEW

This study is being conducted under the auspices of the Audiovisual Center at Michigan State University. The directors of the project feel that more and better information may be acquired by an interview than was originally secured from the questionnaire which you filled out earlier.

The results of the interview will be completely anonymous since your name will not appear on the sheet. By supplying this information, you may very well be helping to improve the audiovisual programs and their services to teachers, in the public schools in Michigan.

The following questions are designed to find out how you feel about the audiovisual service in your school.

1. Teachers do not agree in their feelings about audiovisual materials. Where would you place yourself on this scale? (We are not seeking your endorsement. We want your real opinion.)



Why do you feel this way?

---



---



---



---



---



---

2. How often do you use:  
 filmstrips? \_\_\_\_\_  
 films? \_\_\_\_\_  
 recordings? \_\_\_\_\_

- |                  |               |
|------------------|---------------|
| 1. Almost daily  | 4. 1-2 times  |
| 2. Weekly        | yearly        |
| 3. At least once | 5. Never used |
| each month       |               |





3. (a) Do others tend to use these materials more or less frequently than you? More \_\_\_\_ Same \_\_\_\_ Less \_\_\_\_  
(If more or less) Why?

---



---



---

- (b) Does the principal encourage or discourage heavy use of Audiovisual materials? Encourage \_\_\_\_ Discourage \_\_\_\_  
Would you care to explain?

---



---



---

4. Should teachers make greater or less use of Audiovisual materials than they do now? More \_\_\_\_ Same \_\_\_\_ Less \_\_\_\_  
Other \_\_\_\_ Would you care to explain?

---



---



---

5. (a) Are the audiovisual materials you have at your disposal good or not? Yes \_\_\_\_ No \_\_\_\_ Please explain.

---



---



---

- (b) Do they do the job you want them to do? Yes \_\_\_\_ No \_\_\_\_  
Please explain.

---



---



---

- (c) Are they in good or poor condition? Good \_\_\_\_ Poor \_\_\_\_  
Please explain.

---



---



5. (d) Do you have an adequate selection from which to choose or not? Please explain. (Encourage them to break them down into films, filmstrips, and recordings, if they wish.)

---



---



---

6. (a) Do you feel that the teachers in your school use these materials to their best advantage or not?  
Yes \_\_\_\_ No \_\_\_\_ Sometimes \_\_\_\_ Don't Know \_\_\_\_
- (b) Do you feel that your own use of these materials is satisfactory or not? Yes \_\_\_\_ No \_\_\_\_ Can your use be improved? Yes \_\_\_\_ No \_\_\_\_  
If Yes, How?

---



---



---

- (c) Do you think most teachers would like to use them more or are they satisfied with their rate of use?  
Desire more use \_\_\_\_ Satisfied \_\_\_\_ Desire less use \_\_\_\_  
(If more) Why don't they use them more?

---



---



---

7. (a) Are these materials always available when you want them? Yes \_\_\_\_ No \_\_\_\_ (If No) Why do you think they are not available? \_\_\_\_

---



---



---

- (b) Do they arrive when you want to use them? Yes \_\_\_\_  
No \_\_\_\_ Sometimes \_\_\_\_ (If not on time) Why not? \_\_\_\_

---



---



7. (c) Is the equipment available and operable when you need it? Yes \_\_\_\_\_ No \_\_\_\_\_ (If No) Why not?

- (d) Is there a need for more equipment than you presently have at your disposal? Yes \_\_\_ No \_\_\_ (If Yes) What? and How much?

8. (a) Do you feel that these materials do certain things better than the teacher can do them? Yes \_\_\_\_\_ No \_\_\_\_\_ (If Yes ) What? How? (If No) Why not?

- (b) What do you feel is the real function of Audiovisual materials in the classroom?

9. (b) We've been talking indirectly about the strong and weak points of the Audiovisual program. What do you feel are the strong features, if any, of the program?

- (b) What problems do you see in the program which need attention?



Do you feel those can be solved? Yes \_\_\_\_ No \_\_\_\_  
How? or Why not?

---

---

---

10. (a) Have you tried anything new in the way of Audiovisual use this year? Yes \_\_\_\_ No \_\_\_\_ (If yes) What? Where did you get the idea? \_\_\_\_

---

---

---

- (b) Do your fellow teachers ever try new ideas and techniques? Yes \_\_\_\_ No \_\_\_\_ (If yes) Where do you think they get their ideas? (If no) Why not?

---

---

---

- (c) Have you ever tried something one of your colleagues recommended to you? Yes \_\_\_\_ No \_\_\_\_ (If yes) What?

---

---

---







ROOM USE ONLY.

~~JUL 1 1966~~

~~APR 1 1966~~

~~MAY 1 1966~~

~~JUN 1 1966~~

~~JUN 12 1966~~

~~MAY 2 1966~~ 41

~~JUN 30 1966~~

~~JUL 5 1966~~

~~JUL 5 1966~~

~~FEB 14 1966~~

~~JUL 6 1966~~

~~JAN 21 1967~~

~~FEB 3 1967~~

~~SEP 26 1968~~ 123

MICHIGAN STATE UNIV. LIBRARIES



31293104386184