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AN EXPLORATORY STUDY OF THE EDUCATIONAL APPLICATIONS
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MENTALLY HANDICAPPED INDIVIDUALS

DISSERTATION
Presented in Partial Fulfillment of the Requirements
for the Degree Doctor of Philosophy in the
Graduate School of
The Ohio State University

By
R. Lee Eytcheson, B.V.E., M.Sc.Ed.

* * * * *

The Ohio State University
1975

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CHAPTER I
INTRODUCTION

In approximately the last decade, technology has produced a new instructional tool, the videotape recorder. New instructional applications are being reported in current literature, but the full potential of videotape recording has not been fully researched. For example, there are a relatively small number of references to instructional applications in the field of special education, particularly in its application for the education and training of the institutionalized mentally handicapped.

According to Gustafson\(^1\), videotape recording has been used as an observational tool in pre-service teacher education. He states that it burst upon the education scene as a "fever spreading through the education community." This was partially due to the recognized and immediate effect that videotape recording had on an individual's behavior through self-analysis. One innovation possibly affecting the increased use of videotape recording in education was the development of micro teaching by

\(^1\) Kent L. Gustafson "PVTR," Audiovisual Instruction, Vol. XII, No. 10 (December 1967), p. 1067
Dr. Dwight Allen\(^2\) who used videotape recording to record both a teacher in the act of teaching and to record the student behavior during a short (usually 5 to 25 minutes) lesson. The teacher would then observe the replay of the videotape, analyze her behavior and that of the students, then repeat the lesson with another small group of students (up to 5) attempting to improve her teaching performances by changing some aspect of her teaching. She would then watch herself on videotape to again analyze her teaching behavior to determine the results which hopefully would indicate improvement.

The emphasis on behavior as it relates to the learning situation by behavioral authorities such as Amidon, Flanders, Hough and Hunter with their use and development of interaction and verbal analysis was possibly another reason for the popular use of videotape recording in pre-service teacher education.

According to Brophy\(^3\), "many schools put entire courses on videotape." He further states: "thirteen years ago, prominent educators prophesied that


\(^3\) John W. Brophy, "VTR Integral to Classroom Instruction," Audiovisual Instruction, Vol. XVI, No. 4 (April 1971), pp. 36-8
instructional television programs, telecast by educational stations, would revolutionize our educational system."

It would seem over the period of years he indicates some changes have occurred in the applications of videotape recording. For example, he points out that now common practice is to use videotapes as teacher aids rather than teacher replacements.

In the area of Special Education, and more specifically in the education of institutionalized mentally retarded individuals, there are applications for videotape recording other than those heretofore reported.

This writer believes, as a result of instructing institutionalized retarded individuals and supervising teachers for the past three years, there is first, a need for research to determine the extensiveness of the use of videotape recording in institutions for the mentally handicapped; second, there is a need for review of the scope of such uses and the stating of possible guidelines for the use of videotape recording in more than one instructional setting in these institutions; and third, there is a need for some proposed specific applications of videotape recording in the above mentioned institutions. These applications may or may not be used currently but should be recorded to add to existing knowledge in this field.

It is hoped that this study will not only meet these stated needs, but will awaken a greater interest in
the use of videotape recording as a means of increasing the educational opportunities of the residents of these institutions.

STATEMENT OF THE PROBLEM

The literature on the applications of videotape recording in institutions for the mentally retarded is limited in scope. The existing literature reveals that very little has been written concerning the utilization of videotape recording in the education of residents of these institutions. The mentally handicapped individuals found in the state institutions are an educationally deprived or largely neglected segment of our society.

For many decades institutions for the mentally retarded have been administered by medical personnel rather than by educators and in the researcher's opinion that may be one of the reasons for the failure to provide fully for the educational needs of the institutional residents. The institutions have been mostly custodial in nature and the educational needs have been largely ignored or limited to "make work" programs, and "medicate," rather than "educate." Also, less emphasis has been placed upon the educational needs of the institutionalized retarded than on the needs for the community-based retarded who tend to function on higher levels than those confined to the institutions. Those mentally retarded in public school systems' special education programs have had more
advantages and opportunities for "normal" learning experiences. A teacher who has taught students with comparable ability and I.Q.'s in an institution and in public school education classroom says:

I have observed that the child in the special education classroom is much better adjusted socially than the child in an institution. They play with other children on the playground, and ride the same school buses, and eat lunch with the other students. They also often are active in outside activities, such as Girl or Boy Scouts, 4-H, sports teams, etc.

The table manners and the handling of silverware of the children in the public school special education class far surpasses that in a state institution. The children in the public school classes also seem to eat more of a variety of foods.

Another area in which the special education pupil in the public school surpasses is in his speech development which is probably due to his contact and conversations with the students in regular classes. They also use telephones more often, so are able to carry on conversations.

The child in the public school special education class is also given more of an opportunity to express himself in conversation by relating his experiences to adults. He also seems more aware of his world.

In light of such evidence it would seem that those in institutions may be considered more severely handicapped than those not institutionalized.

It is because of this disparity in learning abilities and opportunities for social and vocational skill development within the general classification of educable

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mentally retarded that the writer believes the distinction must be made between the two groups. The primary focus and expected benefits of this study apply primarily to the institutionalized retarded specifically and not to that larger group of educable retarded individuals generally.

This exploratory study will first determine the possible extent to which videotape recording is being used and the scope of its potential use at both public and private institutions for the mentally retarded. Second, it will suggest some ideas for the use of videotape recording as it may apply to more than one group or instructional setting. Third, it will propose some specific educational applications of videotape recording for the institutionalized mentally handicapped, which may or may not be in use at the present time.

This study will be limited to an exploratory attempt to determine the present and potential scope of the applications of videotape recording in institutions for the retarded. An attempt will be made to present the information gathered in such a way that it will be helpful to those who use videotape recording and they will know how others are using it as well. The data gathered and the discussion should not be considered as a technical handbook for videotape recording, but as a compilation of information that if understood, may save time and expense;
and suggest ideas, especially to those who have not had much prior experience in the use of videotaping equipment. This study will be confined primarily to portable videotape recording (PVTR) and closed circuit television (CCTV) because these are adaptable and available for use in institutions for the mentally handicapped. Others such as commercial television, or national educational television (NET) will be referenced where applicable.

The literature search will be limited to the stated area of interest. General terms will be listed and defined, some of which may apply not only to portable videotape recording, but to the field of videotape recording as a whole. Other terms used in this study, or in the field of mental retardation, will be defined as well.

**PURPOSE OF THE STUDY**

The purpose of this study is, through an exploratory sample survey approach, to determine the extent to which videotape recording is being used at institutions for the mentally retarded. Through a study of related literature, the adaptability of videotape recording will be determined to suggest possible ideas or guidelines for specific instructional or educational applications at these institutions. Through personal institutional visits and observations of a model institutional program of vocational education utilizing videotape recording extensively, the author intends to compile data and provide useful
information concerning videotape recording equipment, techniques, and uses in institutions for the mentally handicapped. This will be followed by a second survey to add precision to the findings and update the study of applications, discover potential directions that applications might take in the future, and indicate some of the obstacles to the uses of videotape recording in institutions for the mentally handicapped.

It is hoped, as a result of this study, that the professional staff in the institutions for the mentally handicapped will avail themselves of the opportunity of utilizing videotape recording in an effort to improve their instructional endeavors.

In videotape recording there are many factors and variables which can drastically affect the quality of the finished product and its use. It is important, therefore, that established guidelines be followed, so that equipment, techniques, and conditions be utilized for optimum results. The writer intends to provide current data to assist those using videotape recording for educational purposes in institutions for the mentally handicapped.

It is further hoped that this study will also encourage institutional administrators to discover the values in the use of videotape recording equipment to improve the services rendered by their institutions. Therefore, hopefully, the long-term result of this study will
be improved opportunities for maximum educational development for many of the mentally handicapped residents of institutions.

**DEFINITION OF TERMS**

The Electrography Producers Manual, published by the 3M Company of St. Paul, Minnesota, was the basic reference source used for the following technical television or videotape recording terms. Other terms used in this study or in the field of mental retardation are defined or explained.

**Aspect Ratio:**

The numerical ratio of picture width to height (e.g. 3 units high, 4 units wide).

**Backing or Base:**

The flexible material which is used as the carrier for the magnetic oxide coating of magnetic tape. It is usually either cellulose acetate or polyester; sometimes referred to as the substrate of the videotape.

**Cinching:**

A washboard wrinkled effect in tape, caused by not enough tension when the tape is wound on the reel.

**Compatability:**

This refers to the capability of using different models or types of video recorders to play or record a videotape without modifying or altering the equipment to obtain high quality.
Dubbing:

Recording new sound onto a videotape or duplicating a tape, both audio and video.

Electrography:

The art and science of electronic photography, an example of which is videotape recording.

Feedback:

The howling oscillation, or regeneration of sound caused by a system pickup of the sound (audio) from its own speakers.

Iris:

Optically, the adjustable mask which limits the amount of light permitted to enter a lens--also called the diaphragm or aperture.

Kinescope: (Also Kine)

A film made from shooting the picture on a television monitor.

Mixing:

The combining of audio and/or video signals.

Mobile Video:

A van type truck equipped with videotape recording equipment capable of moving from one geographic location to another for the purpose of videotape recording.

Monitor:

A type of television receiver used for observing the audio and video signals as received from the videotape
recorder.

Omni-Directional:

Literally from all directions. In reference to a microphone, it would be one capable of picking up sound from all directions. (A cardioid microphone will pick up sound from one direction—that in which it is pointed.)

Pan:

Moving the camera from left to right or from right to left.

Playback:

The playing of a videotape upon which a previous recording has been made.

P.V.T.R.:

This refers to Portable Video Tape Recording.

Remote-Control:

The capability of controlling or operating videotaping equipment from another room or at some distance from the equipment itself.

Resolution:

The ability of the camera lens to perceive fine detail in an image. It is also referred to more specifically as vertical or horizontal resolution. The vertical resolution pertains to depth of field and the horizontal to the width of field.

Split Screen:

The pickup and projection of two separate images
from two different cameras simultaneously, each being a portion of the total picture viewed.

**Switching:**

Selecting a single picture from those produced by two or more cameras.

**Tape:** (Also referred to as videotape in this paper)

A magnetic tape capable of picking up audio signals (audio tape) or one capable of picking up both video and audio signals (videotape).

**Taping:**

Also called videotaping or videotape recording, which is the process of recording sound (audio) and pictures or images (video) simultaneously upon a magnetic tape capable of picking up both audio and video signals.

**Tilt or Tilting:**

A deliberate movement of the camera in a vertical direction (up or down).

**Video:**

Of or concerning sight versus audio which is of or concerning sound.

**Vidicon:**

A television camera tube of moderate sensitivity and capable of producing an image suitable for recording. Also adequate for most instructional broadcasting requirements.

Zoom Lens:
A multipurpose lens capable of producing a sharply defined image from close up, intermediate, or normal positions to telephoto or far-away images. The position changing can be done mechanically or is sometimes electrically powered, which enables the camera operator to "zoom" in or out at the touch of a button or switch to produce the desired image.

Non-technical terms used in this study:

Behavior Modification:
Any systematic use of reinforcement, extinction, or punishment used to maintain certain behavior, increase desirable behavior, or decrease undesirable behavior.

Educable:
Refers to an individual with a functional level of intelligence of approximately 45 - 75 IQ. Such persons are sometimes referred to as educables.

Interdisciplinary Team:
A team composed of individuals from several service areas of an institution such as psychology, social service, recreation, nursing service, education, etc.

Mentally Retarded: (Mentally Handicapped)
Terms used interchangeably in this text for they are synonymous. They refer to individuals whose learning
rate is slower than that of a normal person. (Impaired capacity to learn originating usually before, during birth, or in early childhood.)

**Sheltered Workshop:**

An area provided for meaningful work activities where job skills and work behavior can be taught in an atmosphere of productive activities without the pressures associated with competitive employment.

**Social Skill Development:**

Teaching a resident the socially accepted actions and behavior expected of all independently functioning individuals in society.

**Trainable:**

Refers to an individual with a functional level of intelligence of approximately 25 - 45 IQ. Such persons are referred to as trainables.

**SUMMARY**

The study undertaken was to explore the applications and extent of the use of videotape recording in institutions for the mentally retarded. Little has been written concerning the use of VTR for the education and training of the mentally handicapped.

As a result of the writer's interest in videotape recording through teacher education, and work teaching and supervising teachers of institutionalized mentally handicapped, it was believed first a need existed to determine
the extent to which VTR was being used in institutions for the mentally handicapped. Second, a need existed to determine the scope of the use of VTR in these institutions, and third, there was a need for recording some proposed specific application of VTR in these institutions.

With very little literature or research data existing and the institutions for the mentally handicapped being largely custodial in nature rather than habilitative, the problem was to obtain data through the following methodology:

1. Literature study
2. Preliminary survey of institutions
3. Personal visits to selected institutions
4. In-depth study of a model vocational education program utilizing VTR extensively
5. Final survey of institutions for the mentally handicapped

The purpose of the study was to:

1. Determine the extent to which VTR was being used in institutions for the mentally handicapped both in terms of the number of institutions using VTR and the extent of the applications or variety of ways it was being used, and the scope of its potential use
2. Suggest some uses or potential uses of VTR in terms of parent, civic and community groups, institutional employees, and residents of institutions for the mentally handicapped
3. Propose some specific educational applications of VTR for the benefit of the mentally handicapped, which applications may or may not be in use at the present time
To provide a clearer understanding of the subject as presented, some technical terms pertaining to VTR as well as general terms found in the study are defined. The study is limited to the following:

1. Institutions of the mentally handicapped, both state and private

2. Portable videotape recording (PVTR) or closed circuit television (CCTV). Commercial cable, or national educational television (NET) are referenced where applicable

3. The literature search was confined to the stated area of interest

It is hoped as a result of this study that institutional staff and administrators will discover the values in the use of VTR and utilize it to improve instructional endeavors, improve services rendered by the institutions and improve opportunities for maximum educational development of the residents of these institutions.

Little has been written concerning the use of videotape recording in institutions for the mentally handicapped. However, the writer believed there was a need to determine the present and potential scope of the use of VTR in institutions for the mentally handicapped. Also, as a result of this study, hopefully VTR will be used to greater advantage in providing improved opportunities for maximum educational development of the mentally handicapped residents of institutions.
Chapter I provides an introduction to the study, statement of the problem, and the scope, along with terms and definitions for clarification.

A review of the related literature was discussed in Chapter II first in general and historical terms followed by what was found that pertained to the mentally handicapped.

The procedure followed as presented in Chapter III was to conduct a literature review followed by a preliminary survey of the institutions for the mentally retarded. Additional data was gathered through personal visitations, and the study of a model vocational education program at Orient State Institute in Ohio.

A final survey was used to gather data concerning the scope of specific applications for the use of videotape recording in the institutions as well as the scope of potential use of videotape recording at these facilities.

Chapter IV addresses itself to an analysis and discussion of data in terms of the preliminary survey, personal visitations, the model vocational education program studied, and the final survey of the institutions which includes the potential scope of uses of videotape recording in the institutions.

In Chapter V the specific applications of videotape recording for the benefit of institutionalized mentally handicapped was considered in terms of use for three groups:
first, for parents and community groups, second, for institutional staff and third, for the residents themselves.
CHAPTER II

A REVIEW OF THE RELATED LITERATURE

The primary aim of this review was to make a thorough survey of the pertinent literature which has been written concerning the use of videotape recording in institutions for the mentally handicapped.

In establishing the background material and information for this study the following literature was examined: (1) certain sections of authoritative books; (2) periodical literature; (3) dissertation abstracts and over 1200 ERIC and CEC references.

GENERAL DISCUSSION

The literature review revealed that little has been written concerning the use of videotape recording directly in institutions for the mentally retarded. However, much has been written about its use in education. In fact, of over 1200 potential sources, only 16 dealt directly with the process of using videotape recording in teaching the mentally retarded.

Historically, one of the first examples of national recognition of the problem of utilization and evaluation of television in education was the six-state

In that same year, Brugger stated that only two videotape recorders had been produced by competitive American manufacturers, with two foreign models in production and a third in the developmental stage.

The first doctoral dissertation concerning the use of videotape recording in education was written in 1964 by James L. Olivero at Stanford University entitled: Video Recordings As A Substitute For Live Observation In Teacher Education.

Dr. Dwight Allen, while at Stanford University, was one of the first to use videotape recording in developing the micro-teaching technique in teacher education. "Micro-teaching is a scaled-down teaching encounter that has been developed at Stanford University to serve three purposes: (1) as preliminary experience and practice in teaching, (2) as a research vehicle to explore training
effects under controlled conditions, and (3) as an in-service training instrument for experienced teachers."  

All 140 interns (teacher education candidates) participating were videotaped and the primary purpose of using videotape recording was to provide immediate student feedback and replay of the lessons for supervisory conferences.

One conclusion of this study was the success in producing significant behavior changes in the interns during the six week clinic. These participants attributed this to the use of feedback made possible by videotape recording. Lawrence and Dugas indicated by 1968 that an accepted use of VTR was to change teacher behavior through the micro-teaching and self-analysis techniques.

The literature survey suggests to the reviewer that although little has been written about the use of VTR in institutions for the retarded, many of the uses in education can be adapted to the education of the institutionalized mentally retarded. The literature survey

4 IBID, p. 389
further indicated that the techniques of videotaping and the ways in which it can be used vary greatly. Objectives, necessity for its use, and the desire for experimentation, coupled with ingenuity and imagination, are the primary limiting factors. Frank Dendas, manager of television for Yale University says of their use of VTR: "there are so many places in modern education where videotape can help a student learn more in a shorter period of time...and we keep finding new applications every day."  

Bosley and Franzen in their review of some 20 articles written by outstanding authorities on the use of television in teacher education, provide an excellent "state of the art" report as it existed in December 1967. This review also cites several uses for videotape recording as reported in the "Multi-State Teacher Education Project (M-STEP)."  

USES WITH MENTALLY RETARDED

One of the first to report the use of videotape recording to affect behavioral change in the mentally retarded was John W. Brophy, "VTR Integral to Classroom Instruction," Audiovisual Instruction, Vol. XII, No. 4 (April 1971), p. 38


retarded was Tanzman,\textsuperscript{10} who described the advantage in using it to assist mentally retarded students in gaining self-confidence and improvement in speech patterns and writing ability.

The students were in the 13 - 14 age group and had IQ's of 75 or less. They produced their own television programs. They prepared them, acted in them, and then broadcast the programs to the student body.

According to their teacher, "originally they could not work together. They quarreled frequently, had no interest in listening, or in following directions, and hesitated to speak up in class and to do things involving manual dexterity."\textsuperscript{11} He further states: "We are showing these students that they can move on to activities, and to vocations that they once considered beyond reach."\textsuperscript{12} The students also engaged in practical activities such as going into the community and taping interviews with local business people to find out what kinds of jobs were open or available to them. The tapes were shown to the classes. This experience provided the additional advantage of showing the students how to apply for a job, which is an

\textsuperscript{10} Jack Tanzman, "Videotape Turns On Retarded Students," \textit{School Management}, Vol. XII, No. 7 (July 1968), p. 16

\textsuperscript{11} IBID, p. 18

\textsuperscript{12} IBID, p. 18
essential function for them in getting along in society, according to their teacher. A report by Postley and Meachan\(^3\) using closed circuit television for emotionally disturbed children in special education had results similar to Tanzman's.

Current trends indicate a widespread effort exists to bring about a migration of residents from the state institutions back to the community. The mentally handicapped are then to receive whatever treatment or services they appear to need in the newly established community health centers, which are being established by Ohio and many other states.\(^4\)

After investigating a variety of these rehabilitation centers being constructed and in considering the appropriate design or utilization of physical facilities, Bair and Leland,\(^5\) recommended the installation of a

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television studio and control room to be used in program
development. Marshall and Hegrenes, 16 support this use of
videotape recording in their research and literature re-
view. They found the application of the videotape record-
ing system was manifold; for example, patient therapy, par-
ent conferences, student training, and intra, as well as
interdisciplinary communication were some of the applica-
tions. They say that: "Videotape is unique in its capac-
ity to provide an emotional and intellectual as well as
factual transcript of events." 17 Also according to them,
"one to two-minute tapes in the therapy program may be
video-taped and stored. Thus, four or five intervals taken
over a year's time can demonstrate therapeutic progress in
less than ten minutes." 18 They further conclude that:
"The use of video-tape has wide applications in both cli-
cal and academic settings." 19

An excellent reference guide for clinical uses of
videotape recording is: Videotape Techniques in

16 Nancy R. Marshall and Jack R. Hegrenes, "The
Application of Videotape Replay in Academic and
Clinic Settings," Mental Retardation, Vol. VIII,
No. 6 (December 1970), p. 17

17 IBID, p. 19

18 IBID, p. 19

19 IBID, p. 19
Psychiatric Training and Treatment, edited by Milton M. Berger. This reference cites the first use of videotape as a therapeutic tool at the University of Mississippi Medical Center in 1963.

From their study, Moore and his associates report that interviews with the psychiatrist were videotaped, after which the patients were given a chance to see and hear themselves, which altered their psychotic state.

Stoller describes how group psychotherapy was used on television (VTR) with very conclusive and satisfactory results. The author reported that significantly greater clinical improvement was a direct result of the "video-therapy experience." Dr. Berger reports that in his judgement, "the margins of our knowledge of self-image(s) and self-concept(s) will be expanded profoundly by videotape confrontations."


23 Berger, "Videotape Techniques," p. 18
Research done in the field of teacher education in the use of videotape recording has been verified or supported by studies in its use for the education of the mentally retarded. For example, Reichard and Reid, in their study to determine the possible distracting influence of the videotaping equipment and personnel operating the equipment concluded that initially the distraction was great, but soon adjustment was made and there was very little distraction on the part of the students. They recommend a 10 to 20 minute period for student familiarization with equipment and operating personnel for optimum results and the least distraction. These findings are supported by others in the field of teacher education who performed similar experiments, such as Taylor, Lipscomb, and Rosemier.

Due to the shorter attention span characteristic of most retarded individuals, it is evident that they can easily be distracted from any learning activity as


reported by Stephan, Stephano and Talkington. House and Zeaman have implied that, "engineering of attention" is the key to successful training. The most effective communication possible should be utilized in the instruction of mentally retarded students. Because children today are so oriented to watching television, it can be ideally used for classroom instruction. Television provides a much wider variety of experiences and exposure, and combines audio and video signs as a means or channel of communication.

Stephan, Stephano and Talkington in their study to determine the effect of modeling mediums for initiative skill training of the mentally retarded concluded that the use of VTR has potential for teaching mentally retarded particular skills and tasks. In this study they attempted to teach 33 female institutionalized educable retarded subjects to use the telephone by learning the parts of a telephone, to dial a number, and to take a telephone.


28 Stephan, et.al., "Use of Modeling," pp. 63-68
message for another party. They used a live female model for demonstration of the skill task as well as a videotape of her performing the task. The students were successful in performing the task as required after the third repeat of the procedure. The authors suggest that the technique of modeling using VTR is possibly a superior teaching technique for retarded children. "For the retarded, who are characterized as being easily distracted, having low attending behavior, and depend on their external environment for cues as to how to behave...the utilization of the TV media as an instructional tool for teaching other survival skills to the retarded, would seem to have potential for large centers which are short staffed, and which are presently imbued with the responsibility of preparing residents for community living." 29

Two other modeling studies using videotape recording were found. Fechter 30 used 20 aggressive and 20 non-aggressive institutionalized mentally retarded subjects, who were shown an "aggressive" or a "friendly" film of a child playing with a large doll. Friendly subjects tended

29 IBID, pp. 67-68
to model the friendly behavior and the aggressive subjects tended to model aggressive behavior, but to a lesser degree than before they viewed the videotape recording of the behavior. He found that while the specific modeled behavior may not be modeled by the retarded subject the mood of the VTR produced a similar mood in the viewers and their behavior was imitative of that seen on the videotape.

The second study by Nelson, Gibson and Cutting, used the modeling technique to develop three appropriate social responses in a mentally retarded child. This study is rather unusual in that only one student was involved. He was a seven year old mildly retarded boy who was not able to profit from group instruction in other settings. Two seven year old non-retarded boys were used as models. A script was followed and a videotape made with questions being asked and their responses recorded. Next, they were asked to smile at each other and then they were asked just to talk to each other. A 15 minute tape was made for each of the three training sessions for the desired responses of (a) asking appropriate questions,

(b) smiling, and (c) appropriate discussion topics. A total of nine training sessions was used. The boy was able to make the appropriate responses properly after three days of this intensive training and was placed in a normal first grade class. He was still in attendance three and one-half months later when a successful post test was given. The authors concluded that:

A relatively economical and novel procedure was the use of normal peers as models on videotape. Videotape could be very versatile in presenting any needed modeled response; indeed, Lombardi and Poole (1968) and Striefel (1972) have previously advocated the increased use of video equipment in the training of retarded persons. They further conclude that their study:

Provides some evidence that the use of videotaped peer models, especially in combination with instructions and social reinforcement, holds a great deal of promise as an effective training procedure.33

The literature reveals that videotape recording can play a vital role in teaching the retarded how to perform the job skills, as well as the social skills necessary to live away from the institutions. The successful results reported in the use of videotape recording for this purpose at the Johnnie Appleseed Center in Indiana, Dixon State

32 IBID, p. 27
33 IBID, p. 27
School in Illinois, and Orient State Institute in Ohio should encourage other institutions to avail themselves of this application. There are two benefits occurring from this recommendation, and they are: first, "each retarded person requires a careful assessment of his individual potential before he can enter into an effective program of rehabilitation," and secondly, "mentally retarded, who become candidates for employment outside of sheltered workshops, are those who have received thorough training not only in occupational skills, but in the social skills necessary to get along on their own." 

One of the more recent studies using videotape in working with the retarded was reported by DeRoo and Harrelson. In 1971 they state that a review of the literature revealed there were no reports of "self-visualization" (which to them means viewing a videotape recording of one's own behavior) with mentally retarded subjects. They further state the purpose of their study was to


35 IBID, p. 23

compare the effect on the work output of those videotaped while working in the sheltered workshop environment with those receiving verbal intervention and close supervision during pre-vocational evaluation while working in the same sheltered workshop.

The article described the use and evaluation of videotape recording to increase productivity among educable young adults. Twelve were used as subjects who were divided into two groups of six each. The one group was videotaped for 15 minutes each day while working. The group members were then permitted to view themselves. This procedure was followed for a period of one week. The viewing sessions concentrated on the non-productive behavior, primarily to identify such behavior. These viewing sessions were of 15 minutes duration. The second or control group met for the same period of time each day and the experimenter mentioned the non-productive behavior that had occurred.

Those subjects, who viewed their work behavior, increased their production dramatically compared to the second group who received the traditional verbal feedback only. Production levels were maintained after the viewing procedure was discontinued.

The results and conclusions of the DeRoo and Harrelson study suggest that the use of videotape recording (the self-visualization technique) is, "a potent tool
with broad applicability in supplying behavioral feedback to individuals." They said, "it was obvious from comments made by subjects during self-visualization sessions that they often had been partially or totally unaware of the nature and frequency of their non-productive behaviors during work sessions." The authors concluded that the increased awareness of the non-productive behavior was the reason for the increased productivity among those who were videotaped because the group of six who were not videotaped showed little or no production gain.

One further technique used very effectively for social behavior adjustment at Orient, and reported by Rieger 1973, as beneficial to students learning by doing as it relates to communicating, is to let the students do the television lessons themselves including operating the videotape recording equipment. Today, student involvement is urged on all educational levels. Videotape provides a medium for pupils to create, produce, and evaluate their own work. Rieger says, "learning by doing is learning that lasts."

37 IBID, p. 24
38 Arlene Rieger, "Raise Student Speaking Ability Through TV and Videotape," Instructor, Vol. LXXXII, No. 6 (February 1973), p. 200
Videotape recording seems to have an inherent motivational factor that can be used to advantage no matter what the subject to be taught might be. There can be positive reinforcement provided with the immediate feedback with the students benefitting many times as a result of the second look on instant replay. "For the current generation of children, television is the major motivation in the home: videotapes in the classroom channel this same attention toward class activities especially when they are personally involved." It has also been noted that the students, after viewing the videotapes, especially those in which they have a part, are more careful in their class or shop activities. The students appear to take greater pride in their task accomplishments, their behavior and interaction with each other improves, and apparently their interest and attention is increased and lengthened.

The related literature reveals the relationship of the use of videotape for teacher education and the resulting use of videotape recording in the institutions for the purpose of in-service training or staff development. Teacher education is largely what the literature

concerning videotape recording was all about for the first seven years beginning with the six-state conference in 1962 at Marshall, Indiana. This conference was the first example of national recognition of the problem of utilization and evaluation of videotape recording in education.40

The Department of Mental Health in the State of Illinois, has a new closed circuit television system which connects every facility in the state and the general offices to a studio in Springfield.41 This is an example to indicate that some state departments of Mental Health are recognizing the use or need for the use of videotape recording.

This project permits not only the circulation of videotapes for use in the individual state institutions, but the dissemination of vital or pertinent information from the central office to all the institutions simultaneously. Another advantage is that all of the working shifts will be able to get the information through videotape recording so that within a 24 hour period every

41 "Pilot Study of CCTV Begins for Employer Communications," Insight (Springfield, Illinois: Department of Mental Health, December 1971)
employee in the state will have received the same information from the same source without having to receive it via "the grapevine," newsletter several days later, or in some other less effective manner.

One other new research project utilizing videotape and affecting the mentally retarded has been initiated by the Child Development and Mental Retardation Center at the University of Washington in Seattle. It is called ALLSCAN I.42 This fully portable automated system consists of three cameras, three microphones with a logic-control network, and a videotape recorder capable of gathering up to 10 hours of data over a 10 day span of time, and selecting what is to be recorded automatically.

The ALLSCAN system can be installed in a home (with approval of parents) for the purpose of obtaining behavioral information gathered in a natural rather than a clinical atmosphere for diagnostic purposes. This provides for a compressed cross-section of 10 days activity, which can be evaluated and replayed as often as necessary to determine clues and possible corrective help for deviant or unacceptable behavior.

This technique of studying interpersonal relationships in a natural setting, with or without the knowledge of the retarded individual, provides clues and insight into not only the verbal but into the non-verbal behavior which many times cannot be obtained in any other way than to re-live the moments and study them through the use of videotape recording. This capability permits much more accurate observational analysis, and thereby provides for a higher degree of skill in diagnosis and treatment according to the author.

Videotape has also been used to teach parents of retarded individuals behavioral analysis principles and applications. 43

One of the most unusual uses for videotape recording was reported by Bricker, Morgan and Grabowski, 44 who used commercial trading stamps as positive reinforcers in teaching job skills to cottage attendants. They recorded job performance, and had raters view the tape playbacks


to determine the total interaction time used (which was shown to the attendants) and which determined the number of trading stamps they were to receive. Other than the contingency management aspect, this technique of videotaping, observing and rating followed by tape playback, is similar to that reported by Flanders for teacher education and in-service training of teachers. This technique has been used by Amidon, Allen, and others in the field of teacher education.

Austin reports on how videotape is used as a teaching tool in the Johnny Appleseed Center for retarded in Allen County, Indiana. This community training center provides education and training for about 200 mentally retarded ranging in age from 3 to 40. In addition to the program director and principal-psychologist, there are 12 special education teachers and 6 foster grandparents who serve as teacher aides, in addition to a staff of 3 who operate a sheltered workshop. About two-thirds of the pupils attain the goal of economic independence as community members. The vocational education (sheltered workshop)


training period averages over 2 years. A variety of sub-contracted work from local firms provides training and wages. When the skills are learned, job placement follows. Videotape recording is an integral part of this program operation. It was previously adopted to: "help modify the attitudes of persons working with retarded individuals." The purpose of its use is similar to that described by Bricker, et.al.

Other uses of videotape recording in the Johnny Appleseed program are: (1) To rebuild the resident's lost enthusiasm about his progress by showing him his achievement recorded on videotape. (2) To better inform parents of the student's progress and performance at parent-teacher conferences. (3) To inform visitors and civic groups concerning the program's operation. (4) To help train volunteers and university students. (5) Concentrated instruction for new teachers who consider it a teaching-learning tool rather than a "Big Brother" according to Austin. He also reports, "the results achieved with videotape recording have been impressive. Videotape recording has been an effective teaching tool with mentally handicapped children and young adults."

47 IBID, p. 558


49 Austin, "Videotape As A Teaching Tool," p. 558
A report on the use of videotape recording for in-service teacher education for special education teachers by Anderson and Little, emphasized the importance of student-teacher contact with children. Videotape recording is used extensively in the program in special education at Illinois State University from the freshman year, where the students are exposed to a variety of videotapes featuring actual classroom teaching techniques. In the sophomore year therapy sessions on videotape are used extensively along with televised demonstrations and observations of children in a variety of settings. In the junior and senior year practicum experiences are used in addition to student teaching and videotaped interviews for future reference.

SUMMARY

Although much has been written about the use of videotape recording in the field of education and little has been written concerning the use of VTR with the mentally handicapped, there are many applications for the use of VTR which can benefit the residents of institutions for the retarded. The techniques and uses of videotape recording vary greatly with new applications discovered daily.

according to some who are using it.

In the field of psychology and psychiatry videotape recordings have been found to be a valuable tool with manifold applications.

One of the strongest arguments for the use of VTR in the education of the mentally retarded is that the most effective communication possible should be utilized. Many of the researchers advocate an increased use of VTR in the training of the mentally retarded. Indications are that the use of VTR is increasing in institutions for the mentally retarded, and in Chapter IV data on the uses of VTR in such institutions will be analyzed.
CHAPTER III

PROCEDURE

Five necessary steps were undertaken to fulfill the purposes of this study, and were accomplished and are reported in the following order: First, the literature was reviewed to determine the use to date, of videotape recording with the mentally retarded. Second, an initial survey of both public and private institutions for the retarded was conducted. Third, personal institutional visits were made to gather data first hand and to observe directly, specific programs in operation. Fourth, a model vocational education program was studied because it utilized VTR extensively in the program's operation. Fifth, a final survey was made of the institutions to determine their specific uses of VTR and the scope of the potential uses.

LITERATURE REVIEW

A search and study of the current related literature was undertaken to determine the applications of videotape recording in more than one instructional setting, as well as to determine the possibility of establishing guidelines in the use of videotape recording in educating mentally retarded individuals.
Another objective of the literature search was to consider the possibility of adapting some reported uses of videotape recording to some similar use in institutions for the mentally retarded. For example, Pratt and Winder, describe how videotape recordings were used to encourage certain students to attend Austin College in Texas. Segments of college life were videotaped, then played to the prospective students and parents of students. According to their findings this proved superior to printed brochures and advertisements in bringing the college campus to the home. Institutions for the mentally retarded could use VTR to show parents, as well as the retarded person, what life at the institution would be like. This could make the change less traumatic. Conversely, this technique could be adapted to show what it is like on the "outside" and prepare institutional residents for a return to life away from the institution and living successfully in the community.

The 16 references concerning the use of videotape recording with mentally retarded individuals were discussed in Chapter II of this study.

The literature search demonstrated that very little was written concerning the use of videotape recording in institutions for the mentally handicapped. A total of 16 references were found, only 12 of which pertained to the use of videotape recording with institutionalized individuals. To supplement this, a preliminary survey was planned to determine the extent to which VTR was being used in such institutions. Specifically, the survey was designed to determine how many institutions were using VTR, and generally how they were using it in educational or instructional applications. After consultation and assistance from Education and Audio Visual instructional personnel at Ohio State University, a preliminary survey instrument was drafted to gain the desired information.

A letter was prepared to accompany the survey form and both were sent to all 218 state and private institutions for retarded individuals in the United States and Canada, to determine the extent and ways in which videotape recording was being used at these institutions. A copy of the letter and the preliminary survey form appear in Appendix A and B. Responses were received from 160 institutions, constituting a 73% response. The list of the residential institutions for the mentally handicapped and the names of the superintendents was received from the Executive Director of the National Association of
Coordinators of State Programs for the Mentally Retarded Inc. and from the Executive Director of the National Association of Private Residential Facilities for the Mentally Retarded. This represented the most up-to-date list of institutions available.

PERSONAL VISITATIONS

Personal visits were made to four selected institutions in Ohio so that first hand information could be gained in observing the use of videotape recording in a specific program of television instruction in language development under a federal grant, title I funding for the different institutions. The visits provided insight concerning the problems, advantages, disadvantages and possible effectiveness of the programs which were in evidence due to the variation in the techniques of operating the program and equipment. The four institutions visited were Columbus State Institute, Apple Creek State Institute, Gallipolis State Institute and Orient State Institute. These institutions all had identical funds, similar programs, and personnel, but the operation of the programs and the use of videotape recording equipment was vastly different.

Two other institutions were visited, one in Illinois and another in Connecticut. These were selected partly because each had similar type resident populations but apparently different philosophies of operation, and partly
because they were accessible. One institution had approximately 2100 residents and the other approximately 100 residents. The impressions gained from these visits are reported and analyzed in Chapter IV.

**MODEL VOCATIONAL PROGRAM**

As a source of information for guidelines, ideas, and specific applications of videotape recording, a study was made of a program of vocational education developed as a model specifically for institutionalized mentally handicapped individuals. This program, developed at Orient State Institute, Orient, Ohio, by the Ohio Division of Mental Retardation and funded by the State Department of Vocational Education, uses videotape recording as an integral part of the entire program. Its use in this program is presented and discussed in Chapter IV.

**FINAL SURVEY OF INSTITUTIONS**

A final follow-up questionnaire was mailed to 210 institutions to survey the present capabilities of using VTR in the specific ways that had been indicated by the original survey data. Also an attempt was made to determine what was considered to be the potential for the use of videotape recording in each category with present capabilities, for each of the institutions responding. The survey contains a total of 88 questions in 12 major categories with a yes or no response for both use and potential for use. A copy of the final survey instrument with
graphed results can be found in Appendices D, E, and F.

The review of the literature, institutional surveys, personal visitations, study of the model vocational program and a final survey were used to fulfill the purposes of this study, which were:

1. To determine the extent and nature of the use of videotape in institutions for the retarded

2. To provide material and information for later use in developing guidelines and ideas for the use of videotape recording in these institutions, which had not been done to date, thereby adding to existing knowledge in this field

3. To propose some specific applications for the use of videotape recording in institutions for the mentally retarded. These applications were considered for three groups of people:

   (a) For parents and community groups

   (b) For the institutional staff

   (c) For the institutional residents

The data secured is reported and analyzed in Chapter IV.
CHAPTER IV

INSTITUTIONAL USE OF VIDEOTAPE RECORDING

To determine the institutional use of videotape recording an introductory letter and a survey questionnaire were submitted to elicit the desired information. Four institutions in the State of Ohio and one each in Illinois and Connecticut were visited to make personal observations and obtain first hand information about the programs using videotape recording at these institutions. An innovative vocational education program at Orient State Institute, Orient, Ohio, which utilized videotape recording extensively, was studied to obtain additional data concerning its use.

A final survey questionnaire was sent to the same institutions to which the original survey was submitted, as a follow-up to the original survey questionnaire to provide more specific and current data concerning the institutional use of videotape recording and its potential use. The results of these studies of the institutional use of videotape recording are reported in this chapter.

ANALYSIS AND DISCUSSION OF DATA

(a) The Survey

The introductory letter and preliminary survey
questionnaire were sent to 218 state and private institutions for the mentally retarded in all 50 states and 6 provinces of Canada. This was the most up-to-date list of the institutions for the mentally retarded that was available. A total of 160 returned replies (a 73% response) including institutions in 45 of the 50 states and 4 of the 6 Canadian provinces, giving a broad coverage from the two countries.

Responses to the preliminary survey questions are presented on a question by question basis with the question underlined, followed by the tabulated responses. See appendix C for graph of these responses.

1. Are you using videotape recording equipment at your institution now? One hundred sixteen (116) stated yes, they were using it now and thirty-five (35) indicated they were not at present using videotape recording equipment. Have you used it in the past? Ninety-seven (97) had used it in the past and forty-four (44) indicated they had not used it in the past and nine (9) felt the question did not apply. This appears to indicate that nineteen (19) of the institutions had recently purchased their equipment.

2. Is it used for classroom instruction only? Eleven (11) indicated it was and one hundred twelve (112) stated it was not used for classroom instruction only. Twenty-six (26) gave no response or indicated this question was not applicable at their institution.
Uses other than classroom instruction as indicated by the survey instrument are:

<table>
<thead>
<tr>
<th>Use</th>
<th>No. of institutions using it for the purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher and volunteer training (in-service all areas)</td>
<td>65</td>
</tr>
<tr>
<td>Pre- and post-tests for resident progress</td>
<td>27</td>
</tr>
<tr>
<td>Recreation and leisure time activities</td>
<td>20</td>
</tr>
<tr>
<td>Counselling, research and records</td>
<td>19</td>
</tr>
<tr>
<td>Group therapy and behavior modification</td>
<td>15</td>
</tr>
<tr>
<td>Program evaluation</td>
<td>13</td>
</tr>
<tr>
<td>Guest speakers and special events</td>
<td>12</td>
</tr>
<tr>
<td>CCTV and language development</td>
<td>11</td>
</tr>
<tr>
<td>Vocational education workshops</td>
<td>6</td>
</tr>
<tr>
<td>No explanation of other uses given</td>
<td>17</td>
</tr>
</tbody>
</table>

3. What departments use the VTR equipment? Some institutions indicated only one department was using VTR equipment while others indicated more than one department utilized the equipment in their program. The number of departments of each type reporting use of VTR equipment is:

- Education Department: 64
- Staff Development: 51
- Psychology, Counselling: 39
- Nursing Service: 31
- Recreation: 28
- Vocational Education and Work Activity Training Center: 20
4. What type of videotape recording equipment do you have? and 5. What was the approximate original cost?

Of the one hundred sixty (160) institutions that responded, one hundred twelve (112) or 70% were using videotape in some way. Of the 107 institutions that gave cost estimates, the videotape recording equipment investment varied from $600.00 to $112,000.00. The average expenditure for videotape recording equipment was $7,950.00 and the median was $4,600.00. The most expensive equipment included a complete closed circuit system with cameras located in the cottages, classrooms, and even on the playground, where independent behavioral studies were conducted without the influence of people or voice cues which influence such behavior. In the institution where this system was used they reported the primary objective of the institution was to teach self-help skills and behavior which
they felt could be accomplished more successfully through the use of videotape recording. This institution's residents were all profoundly retarded with IQ's of less than 25.

The descriptions for the types of equipment were very diverse, running the full gamut of equipment on the market. The equipment varied from a small 1/2" portapack battery operated recorder capable of recording twenty minutes maximum on a reel of tape to a complete closed circuit system with studio equipment including special effects generators, chain film, special lighting, studio props, backdrops, etc.

To further illustrate the divergence of thought concerning the use of videotape recording as opposed to the above described program and expenditure, two institutions reported they had purchased $1,500.00 worth of equipment but had not yet put it to use. They stated the greatest disadvantage was the high cost of the equipment. Others which did not have videotape recording equipment reported they would invest in it if funds were made available to them for this purpose.

6. Is your videotape recording system portable?
There were ninety-three (93) yes responses, twenty-two (22) no responses, thirty (30) made no response to the question and six (6) stated yes and no, probably indicating it was either semi-portable (meaning difficult to carry from place
to place) or that part of their equipment was portable and part of it was not portable.

7. If you do not have videotape recording equipment now, do you plan to get it in the near future? A total of one hundred eight (108) institutions responded that this question did not apply (probably because they already had the equipment). Thirty-one (31) stated they intended to get it in the near future and seventeen (17) replied they did not intend to invest in it. Of the seventeen replying that they didn't plan to get it, five indicated it was because of a lack of funds. Two also expressed a desire for assistance in justifying such an expenditure so that it could be purchased.

8. Do you feel it would benefit your institution to have this type of equipment? Sixty-one (61) institutions responded in the affirmative in response to this question and seven (7) responded negatively. The greatest response was eighty-five (85) stating it did not apply, either because they did not have the equipment, or because they did already have it, or they felt that this information was provided by one of the other questions.

9. How would it be of benefit to your institution, or how would you use it? One hundred and five (105) did not respond to this question. Other responses are as follows for the twelve (12) groups of types of use:
10. Were your personnel professionally trained to operate the equipment? Before the equipment was obtained, or after? Seventy-one (71) answered the first question in the affirmative indicating the persons operating the equipment were professionally trained in its use. Fifty-five (55) replied in the negative indicating they were not professionally trained to use the equipment. Twenty-five (25) did not respond to this first question. In response to the second question thirty-three (33) stated they had received their training before obtaining the equipment and fifty-three (53) received the training after obtaining the equipment. A total of sixty-seven (67) did not respond to this second question.
11. What do you consider the greatest advantage to your institution in using videotaping equipment? The responses to this question were divided into fifteen separate categories which are listed as follows:

In-service training 54
Accurate feedback and replay 32
Better instruction 31
Behavior modification and resident evaluation 26
Self-analysis 26
Program evaluation 18
Time and money saved 13
Administrative communication 12
Special programs 12
Ability to reach more residents 11
Outside program playback 11
Public relations 7
Research 3
Vocational Education 2
No response 32

12. Do you have a vocational education program at your institution? Eight (8) institutions did not respond to this question. One hundred fourteen (114) stated they did have a vocational education program at their institution, and thirty (30) responded in the negative.
13. Do you use videotape recording in your vocational education program? A total of twenty-six (26) institutions did not respond to this question. Eighty-eight (88) institutions stated they did not use videotape recording in their vocational education program and forty-six (46) stated they did use it in their vocational education program.

14. If yes, describe briefly how it is used.
Forty-six (46) institutions gave positive replies, and together reported uses for a total of ninety-nine (99) since many respondents listed more than one use. Their responses were categorized as follows:

Instruction 35
Demonstration 29
Individual reinforcement 20
Program evaluation 4
Documentation 4
Personal evaluation 4
Train staff 2
Public information 1

15. Do you have a sheltered workshop at your institution? Eleven (11) institutions chose not to respond to this question. Seventy-seven (77) replied in the affirmative and sixty-three (63) responded in the negative.

16. How is videotape recording used in the sheltered workshop? Used: Yes____ No____ explain how: A
total of sixty-four (64) institutions did not respond to this question. Of the eighty-eight (88) who did respond, seventy-two (72) indicated they did not use videotape recording and sixteen (16) stated they did use it in the sheltered workshop in the following ways:

- Teach job skills: 8
- Public relations for new contracts: 6
- In-service training and documentation: 4
- Analyze operations and evaluate program: 3
- Motivation and for providing a series of community experiences: 2

17. **What do you consider the greatest disadvantage in using videotape recording?** The responses to this question fell under the following classifications or categories and are listed in decreasing number of responses:

- Need for skilled operators: 46
- Cost of videotapes and/or equipment: 34
- Equipment too cumbersome (non-portability): 19
- Constant maintenance: 17
- No disadvantages: 16
- Unreliable results due to incompatibility and non-standardization of equipment: 16
- Time consuming to use: 15
- Wrong type of equipment purchased or space and lighting problems: 9
- No response: 31
It would appear from the results of the survey that a broad interest in the use of videotape recording in institutions for the mentally retarded does exist.

One other observation of the survey results which appears to be rather significant is that the responses to questions 13 and 16 revealed that 114 institutions had a vocational program but only 44 of these used videotape recording and of the 77 institutions that had sheltered workshop programs only 16 of them utilized videotape recording in those programs.

One statement received on a questionnaire which supports the writer's hypothesis that a need exists for more research in the area covered by this study is as follows:

We have had our equipment just over a year and are just now beginning to put some of our programs using videotape into use. Since there has been little research done using videotape as a teaching medium with retarded people, we have felt almost hesitant at times in implementing some of our programs. We are glad to see more and more work done in this area.

Several of the survey responses from the institutions expressed a desire to know how other institutions are using their videotape recording equipment. One typical reply for example, was expressed this way: "A major disadvantage is overall lack of staff knowledge in utilization of videotape recording. A training manual and workshop would be helpful."
One other comment written on the questionnaire stated, "Our staff feels very strongly that the use of videotape can be implemented with great advantages by almost every discipline." This came from an institution that does not have videotape equipment but plans to obtain it in the near future. Their only experience with videotape equipment they reported was a university volunteer student who had access to it and used it on occasion at the institution.

Another institution response stated: "The greatest disadvantage in using videotape recording equipment is the lack of personnel trained in its operation and lack of personnel schooled in its potential." Another stated it as, "It's only as good as the person using it." Many others also indicated shortage of competent personnel was a major problem area.

In the state of Texas one institution reported they made a survey of the other institutions in the state in 1971 (19 other institutions) concerning the use of videotape recording. All eleven (11) institutions that have videotape recording equipment, replied in the affirmative that they would be interested in participating in a joint statewide workshop. This would seem to indicate they felt a need for in-service training concerning the use of videotape recording equipment. It would also appear that the workshop approach
could provide the advantages of sharing information, increasing familiarity with the equipment, and learning of advantages and disadvantages encountered by those who have experience and expertise in its use.

In reviewing the survey results, again a wide range of techniques and applications or uses for videotape recording in the institutions is indicated. The following uses are listed to show the way videotape recording is being utilized in most institutions as indicated by the survey with no attempt to determine the order of importance. The most frequent use was for staff development and in-service training (112). This was followed by classroom instructional use (95). Research combined with physical studies and counselling was next (63), followed by resident evaluation and behavior modification (54), community public relations and special events (48), vocational education (39), recreation and field trips (35), program evaluation (20), parent education and instruction (13), videotaping of commercial television broadcasts (7), and surveillance (3).

It would appear there is some relationship between the use of videotape for teacher education and staff development recorded in the related literature, and the possible use of videotape recording in these institutions for that same purpose. This (uses in teacher education) is largely what the literature was all about for the first seven
years beginning with the six-state conference in 1962 at Marshall, Indiana.¹ It is also interesting to note the survey revealed that 50% of the institutions using videotape recording were using it in some research activity.

Possibly one factor which may be significant is that many of the employees responsible for videotape recording at the institutions have not had any specific guidelines or training in videotape recording as it applies to the institutionalized retarded population.

One of the institutions surveyed, broadcasts its own educational television program twice a week through its closed circuit television system. The Education Department of the institution provides programs for the school's residents. In the researcher's opinion this is an example of one of the better organized educational programs using videotape recording as indicated by the survey instrument. The curriculum used by this institution is adapted from Davis,² and a copy was sent to the researcher along with the questionnaire (see appendix G). Many of the areas in this curriculum could be expanded and adapted to the level of residents at the various institutions.

² Patricia A. Davis, Teaching the Mentally Retarded (Minneapolis, Minnesota: T. S. Dennison & Co., Inc., 1970), pp. 12-14
The following information was received from the survey respondents from the state of California. They state plans are to operate a multi-media center in each of the 12 facilities for the mentally retarded in the state under the Department of Mental Hygiene. These centers will exchange instructional material produced so that knowledge can be shared. According to the report this approach eliminates much of the duplication in instruction and with a coordinated effort, quality instructional materials can be produced whereby residents of all institutions can benefit. This is especially true of the videotapes produced under such an arrangement.

One of the institutions responding to the survey pointed out that: "the student behavior modification factor is inherent in videotaping because residents from the low functioning (below 25 I.Q. range) to the higher educable range (above 50 I.Q.) like to watch television and will listen to a television lesson videotaped with a classroom atmosphere much more readily than if they were in the classroom themselves." It was further stated: "The television is an attention getter for them, and it has been noted that the residents are especially interested when seeing themselves, their peers, or someone they recognize on the television screen." In this respondent's opinion, this instructional asset can be capitalized upon in an organized, coordinated approach in the use of videotape
recording for educational purposes in a program such as the "California Plan."

By permitting the residents to see and hear themselves as they act and sound under a variety of conditions and circumstances, they can be taught to accept changes, supervision, criticism and increased individual responsibility. Personal observation and reports from those working with residents at institutions,3 indicate the above four areas (accepting changes, supervision, criticism and responsibility) are particularly crucial for institutionalized retarded individuals. Characteristically, the retarded have great difficulty adjusting to changes, accepting supervision from more than one individual, accepting criticism, or accepting individual responsibility. As Nitzberg4 says:

> It is commonplace for our clients to expect others, intelligent normal adults, to take care of them. It is commonplace for our clients to blame their plight on others, which in a large basic sense is legitimate. It is commonplace for them to resist finding ways of helping themselves with the burdens of their handicaps and available opportunities. Although they are often angered when called retarded, many will wave retardation like a banner to justify continuing dependency and failure to venture and help themselves.

3 Gerda Corvin, Howard Madover, et.al., "What is Mental Retardation?" Digest of Mental Retardation, Vol. V, No. 3 (Spring 1969), pp. 171-73

4 Jerome Nitzberg, "Group Work With Mentally Retarded Adolescents and Young Adults in a Vocational Rehabilitation Center," The Journal for Special Educators of the Mentally Retarded, Vol. IX, No. 1 (Fall 1972), p. 49
The diversity of the use of videotape recording for classroom instructional purposes is evident from the responses to the survey instrument and is typical of what was observed on personal institutional visits.

(b) Personal Visitations

The four institutions visited in the state of Ohio were using videotape recording for presenting a language development program funded under a title I federal grant on closed circuit television systems. There were some similarities in the program operations at the four institutions because they were all operating under the same grant. However, it appeared that there was more diversity than one might expect. Information based upon interviewing participants and program directors at these institutions revealed that the programs were widely different in scope and operation. One institution had four levels of instruction based upon chronological age and I.Q.

Level I  Young trainables (I.Q. 25-45)
Level II  Young educables (I.Q. 45-75)
Level III  Adolescent trainables
Level IV  Adolescent educables

For levels I and II a puppet and a teacher dressed as the old lady in the shoe were being used to teach the lessons. Comical human characters were used to teach level III lessons and job skills were emphasized for the level IV instruction with visits to work areas on the
institution grounds showing people at work, (both residents and employees). This was done to help prepare them for placement away from the institution. Special events were being videotaped and televised to all residents at the institution. The primary approach appeared to be entertainment, patterned after some of the commercial television "kiddie" shows.

Another institution had two levels of instruction; level I for trainable residents (I.Q. 25-45) and level II for educables (I.Q. 45 and up). The level I lessons were attempting to teach the residents how to count and do simple addition as well as to learn the alphabet and some simple vocabulary words. The level II classes were about the second grade level with simple stories and games used to teach the lessons. A follow-up to the lessons was used. Teacher aides were assigned to take follow-up materials to classrooms and cottages for the residents to work with, to reinforce the lessons.

A third institution had three levels of instruction with a different teacher for each level. Level I was basically entertainment using puppets and Mother Goose rhymes and stories with very little effort expended in having objectives or follow-up for the lessons. Level II had lessons with objectives and follow-up activities for the residents to do as completion tasks to reinforce the lesson. These activities consisted of coloring, painting,
drawing, cutting out figures and playing games which required counting or selecting by color and shape, different colored objects with a variety of shapes. Level III was more advanced than the above described level II. Similar follow-up activities followed each televised lesson but it was of a more difficult nature and required some reading, writing, arithmetic, and verbal communication. The residents were encouraged to ask questions freely and discuss the lesson. This was done not only to encourage verbal participation but to have the residents learn to express themselves and their ideas freely and appropriately.

The fourth institution with the same program of language development, patterned their program after the "Sesame Street" television show with the music videotaped from that show. Many of their lessons were videotapes of the "Sesame Street" program which were replayed and shown in place of a lesson prepared by the teacher.

The program directors of the Ohio institutions were limited in their knowledge of videotape recording by their own admission. This is reflected in the total program's operation at each institution. One authority says:

To further enhance the quality of the recorded material and to assure maximum recorder performance, all the personnel involved with the use of video equipment should be as familiar as possible with the operation of the equipment
and the basic principles of video recording.\textsuperscript{5} One approach in effect says, here is the equipment use it as much as you want to, which is a sad substitute for another approach which is "soundly conceived projects systematically executed and scientifically evaluated."\textsuperscript{6} In the personal visits to the Ohio institutions, it appeared that the latter approach was not in evidence, but the former approach appeared to have been used in directing the operation.

For example, in the personal visits to the four institutions in Ohio, it was observed that the personnel handled the videotape freely putting fingerprints on the recording surfaces of the tape, they smoked in the recording areas while handling the tape and equipment, the recording areas were dirty and dusty and the camera at one institution had been pointed directly at the studio lights which had caused a burned spot on the vidicon tube necessitating its replacement. These conditions and the results indicated the verity of the statement that; "the

\textsuperscript{5} "Considerations Involving the Interchangeability of Videotape from One Helical VTR to Another," \textit{Videotalk}, Vol. II, No. 1 (1969), p. 3

\textsuperscript{6} Frederick R. Cyphert and L. O. Andrews, "Using the Videotaper in Teacher Education," \textit{Audiovisual Instruction}, Vol. XII, No. 10 (December 1967), p. 1067
majority of the problems encountered with the use of video recording tape are physical in nature." This is also emphasized by Vleck and Gustafson as well as video recording manufacturers who stress the importance of cleanliness and proper maintenance and handling of the equipment.

Dixon State School, located in Illinois, to which a personal visit was made, revealed their new philosophy that trainable (I.Q. 25-45) retarded individuals as well as the educables (I.Q. 45-75) can and should be taught vocational skills at the institution prior to community placement. Also, the preliminary survey revealed that 114 institutions of the 160 responding offered vocational training to their residents. No distinction was made between pre-vocational and vocational training programs. However, to clarify conditions existing at Dixon State School prior to 1971, it was noted as being the second largest state institution for the mentally retarded in the world. In 1971 there were about 4,000 residents. Out of

8 Charles Vleck, "The Video Tape Recorder?" Audiovisual Instruction, Vol. XII, No. 9 (November 1967), p. 952
that number between 1967 and 1971 only about 100 were included in the pre-vocational training program.10 This program was also referred to as pre-vocational and vocational education during the writer's personal visits to that institution. "This institution is an old, well established member of the community and has had community programs in existence for some time, with training taking place at the institution."11

A personal four day visit to Dixon State School was made in January, 1974 to observe this program and the use of videotape recording in its operation.

The superintendent, assistant superintendent, unit managers, heads of the social service and activity therapy departments, the vocational education director, and his staff members were interviewed. All areas of the institution were visited except the hospital itself. The writer was provided access to whatever information and/or records that were of interest. Four cottages were visited in addition to four sheltered workshops, the school, and activity buildings. This gave opportunity for direct observation.


11 Ibid, p. 69
of both employees and residents working in all of these areas.

The current pre-vocational program at Dixon State School involves approximately 350 residents ranging in age from 16 to 70 with the majority in the 35 to 40 age group. The residents are severely and profoundly retarded, with I.Q.'s ranging from 11 up to about 40. The average I.Q. for the total institutional population is below 30. Educationally these residents are classified as "trainable" mental retardates.

The residents in the pre-vocational sheltered workshop program work part of the day and go to class part of the day in the same building. The workshop operates from 8:15 a.m. to 11:00 a.m. and from 1:00 p.m. to 4:00 p.m. with one 15 minute break in the morning and one in the afternoon. The residents do production assembly type operations on contracts (competitively bid) obtained from outside industrial companies. The resident workers are paid wages on a piece-work basis. Eighty-five percent (85%) of the total contract money goes for wages and fifteen percent (15%) is used for the program (new equipment, etc.). Last year (1973) a total of $135,000.00 was paid to the resident workers in wages.

In the classroom the instruction is rehabilitative in nature and related to the workshop. Areas of the curriculum are: money concepts, time, common hand skills,
hygiene, body awareness, basic arithmetic and color recognition.

Videotape recording was being used to show the hand operations required for the sheltered workshop production as well as in the classroom instruction. The residents were able to view themselves while participating in class as well as when they were busy in the sheltered workshop. They discussed not only their own behavior, but were quick to point out behavior of other residents which they felt was not appropriate.

Videotape recording was used in another way at Dixon that was rather unique. They have a Community Youth Corps program in which the participants get remedial classroom instruction, counselling and guidance, and part time employment as trainees at Dixon State School working with the residents. This program is operated by the Vocational Education Department. After a training period they are hired as full time state employees. During their training period they are videotaped as they work with the residents. Trainees view themselves privately, with an instructor or counsellor and also they view each other in group viewing sessions to discuss how they worked or handled a particular situation with free discussion as to what was good or bad about their actions and suggestions for alternative action.
The institutional resident population has dropped from approximately 4,000 in 1971 to a population of approximately 2,100 in 1974. The residents that have been placed into community situations were usually placed in privately operated nursing homes with a sheltered workshop combined. This provides employment and leisure time activity, as well as living facilities. In the city of Chicago alone (about 100 miles from the Dixon Institution) there are five such homes in the ghetto area of the city, in which many of the Dixon residents have been placed (according to the head of the Social Services Department who is responsible for resident placements).

At the one other out-of-state institution visited in Connecticut, videotape recording was used only occasionally by the social worker on an individual basis for improving social behavior and it was not used in any other way. However, it was available to all staff members for use.

(c) Vocational Education Program - Orient State Institute

Videotape recording is used in three ways or for three purposes in the Vocational Education program at Orient State Institute in Ohio. This is a model program designed, developed, and implemented specifically for institutionalized residents who have not been provided with an opportunity for vocational or social development and
coping skills essential for adjusting to community life away from the institution.

This program was funded by the Special Needs Office of the State Department of Vocational Education under the Vocational Amendments of 1968 Public Law 90-576.

In this program the resident students are in the shop or classroom part of the day and part of the day they are assigned to a work station at the institution receiving on the job training in their vocational interest area as determined by the Becker Reading Free Vocational Interest Inventory. While at this work station the resident students are supervised and evaluated daily by an employee assigned to work with them and teach them how they, as employees do their work. The students act as trainees or assistants as they learn to perform the tasks assigned.

The major work categories in which the resident students receive vocational instruction are:

1. patient care
2. laundry service
3. housekeeping and janitorial service
4. food service
5. materials handling

In addition to the above instruction the students are taught related academics, personal hygiene and grooming, social development skills, home economics, and coping skills.
Videotape recording is used extensively in this program. One way is through regular classroom instruction in social adjustment, personal hygiene and grooming, and for teaching vocational skills in the above listed vocational areas. Another way that videotape recording is used in this program is for in-service staff development of the classroom teacher, vocational instructors, and personnel who supervise the students while they are at their work stations in other departments of the institution. A third way videotape recording is utilized in this particular program is in videotaping the resident students while they are at their assigned work stations receiving on the job training. This not only permits the residents to see themselves "in action," which through the self-analysis technique tends to bring about improved desired behavior, but it also provides data for longitudinal studies for accurate objective evaluation of student progress in both skill development and job performance as well as growth in the coping skills area.

One reason this program was developed was because it was recognized that there is evidence in some cases institutionalized mentally retarded individuals are not provided with learning experiences which prepare them for life away from the institution prior to moving into the community setting. This is compounded by the fact that many are not provided with the basic vocational skills to
perform even unskilled jobs for which they have an interest, and could fill as a means of self-support. According to a research study (RD-1275-P) done by the Health, Education, and Welfare Department, in the United States there are about 120,000 moderately or mildly retarded individuals in the institutions "with service designed especially for them which few now receive."  

This report indicates the proper approach to successfully (permanently) placing residents of institutions for the retarded back into the community is to provide them with the rehabilitative services prior to leaving the institution to compete in the world of work.

"The comprehensive services offered included diagnostic evaluation, sheltered workshop experience, vocational training, adult and community education, placement, follow-up, and the use of a half-way house until established in the community. An important factor was the use of maintenance and service departments of the institution as job training sites."  

According to this report none of 128 discharged to the community after participating in the program during

12 "From Institution to Community Living," The Journal For Special Education of the Mentally Retarded, Vol. IX, No. 1 (Fall 1972), p. 58
13 IBID, p. 58
the four years have been re-institutionalized. It was also found that the factors which most contributed to successful community living were coping factors, such as management of personal affairs, job satisfaction and job stability.

The report of this study also states:

This project demonstrates in practical detail how a custodial institution for mentally retarded persons can be transformed into a rehabilitation facility for them. When this is done large numbers of educable retarded residents...can be rehabilitated and returned to independent community living.

Concrete manual vocational skills rather than symbolic material should be emphasized in training. These along with coping skills, which can be acquired from academic education and from programmed instruction similar to Guide to the Community, are the essential ingredients for success. All these experiences except actual work in the community can be made available in the institution.14

The Vocational Education program at Orient, Ohio is very similar to the above program, and the use of institutional departments for on the job training are all integral parts of the two programs. However, the Orient program utilizes videotape extensively and Guide to Jobs for the Mentally Retarded.15

14 IBID, pp. 60-62

It should be noted, however, that the Health, Education, and Welfare research program was between 1964 and 1968 which was before the widespread use of videotape recording even in education, where it was used more than in any other discipline according to the literature.

One other program which is also very similar to the Orient program and the above Health, Education and Welfare program cited is the Johnny Appleseed Center program in Indiana. In this program videotape recording is used in many ways as an integral part of the program just as it is in the Orient program, such as (1) showing a resident his achievement and progress (2) informing parents at parent-teacher conferences (3) informing visitors and civic groups concerning program operation (4) in-service training (5) regular classroom instruction. The major difference in these two programs is that the Johnny Appleseed Center is a community based program whereas the Orient program is within the institution.

(d) The Final Survey

The final survey (see appendices D, E and F) was used as a follow-up to the original survey (which was more general in nature) to gather more specific data than the

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The original survey was intended to provide, and to elicit current data. Two additional dimensions are included in the final survey. First, it included the potential for uses of videotape recording in the institutions. Second, it provided current data for the mentally handicapped, including the major obstacles in using videotape recording more fully.

Twelve separate categories were used in the final questionnaire based upon results obtained from the preliminary survey. The final survey was sent to 210 institutions with a response from 152 of them, representing a 72% return. The results on a question by question basis with the number of responses in each category are as follows:

<table>
<thead>
<tr>
<th>Use</th>
<th>Potential</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>1. Orientation and In-Service Training</td>
<td></td>
</tr>
<tr>
<td>(a) To show new employees the various departments of the institution and how they contribute to the services provided the residents</td>
<td>43</td>
</tr>
<tr>
<td>(b) To inform new employees of the needs and characteristics of the residents they care for</td>
<td>67</td>
</tr>
<tr>
<td>(c) To inform new employees of their duties and what is expected of them</td>
<td>39</td>
</tr>
</tbody>
</table>
1. Orientation and In-Service Training (continued)

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<thead>
<tr>
<th>Use</th>
<th>Potential</th>
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<tr>
<td>Yes</td>
<td>No</td>
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<tr>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>(d) For fire drill and safety instruction</td>
<td>22</td>
</tr>
<tr>
<td>(e) For showing techniques of performing job skills</td>
<td>57</td>
</tr>
<tr>
<td>(f) To keep staff informed on latest information available in their respective fields</td>
<td>64</td>
</tr>
<tr>
<td>(g) To inform volunteer workers of their role as volunteers</td>
<td>46</td>
</tr>
<tr>
<td>(h) To record guest lectures such as documentary or professional presentations</td>
<td>77</td>
</tr>
<tr>
<td>(i) Available for staff to use for self-analysis as desired</td>
<td>87</td>
</tr>
<tr>
<td>(j) Utilized at workshops for staff development</td>
<td>97</td>
</tr>
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</table>

2. Teaching Aid and Classroom Instruction

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<tr>
<th>Use</th>
<th>Potential</th>
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<tr>
<td>Yes</td>
<td>No</td>
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<tr>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>(a) Used for T.V. lessons in daily classroom instruction</td>
<td>58</td>
</tr>
<tr>
<td>(b) Used to videotape the residents themselves for some of the lessons</td>
<td>97</td>
</tr>
<tr>
<td>(c) Used to present commercial education programs for classroom instruction</td>
<td>40</td>
</tr>
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</table>
### 2. Teaching Aid and Classroom Instruction (continued)

<table>
<thead>
<tr>
<th>Use Potential</th>
<th>Use</th>
<th>Potential</th>
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<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>(d) Used by the students to produce and act in the lessons presented</td>
<td>33</td>
<td>97</td>
</tr>
<tr>
<td>(e) For teacher evaluation and training</td>
<td>58</td>
<td>73</td>
</tr>
<tr>
<td>(f) To teach specific hand skills to the residents</td>
<td>28</td>
<td>99</td>
</tr>
<tr>
<td>(g) For speech therapy and instruction</td>
<td>49</td>
<td>87</td>
</tr>
<tr>
<td>(h) To observe resident students' progress in activity participation</td>
<td>91</td>
<td>47</td>
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</table>

### 3. Research Counselling and Clinical Psychology

<table>
<thead>
<tr>
<th>Use Potential</th>
<th>Use</th>
<th>Potential</th>
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<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>(a) Used to videotape the residents for case studies</td>
<td>60</td>
<td>76</td>
</tr>
<tr>
<td>(b) Use the videotapes for analysis of residents</td>
<td>73</td>
<td>60</td>
</tr>
<tr>
<td>(c) To let the residents see themselves as others see them</td>
<td>58</td>
<td>70</td>
</tr>
<tr>
<td>(d) Use the videotapes for counselling with the residents</td>
<td>25</td>
<td>109</td>
</tr>
<tr>
<td>(e) Utilized in resident evaluations for programming</td>
<td>40</td>
<td>93</td>
</tr>
<tr>
<td>(f) To observe and evaluate gross motor skills and coordination</td>
<td>55</td>
<td>81</td>
</tr>
</tbody>
</table>
3. Research Counselling and Clinical Psychology (continued)

(g) To show residents acceptable dress and conduct for different occasions in the community

<table>
<thead>
<tr>
<th>Use</th>
<th>Potential</th>
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</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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<tr>
<td>40</td>
<td>93</td>
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<tr>
<td>93</td>
<td>30</td>
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</table>

(h) To show how to apply for a job and interview for employment

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<tr>
<th>Use</th>
<th>Potential</th>
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<tr>
<td>Yes</td>
<td>No</td>
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<tr>
<td>31</td>
<td>100</td>
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<tr>
<td>89</td>
<td>32</td>
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</table>

(i) To use the interdisciplinary team approach to structure individual programs for residents based upon videotape analysis of the residents' needs

<table>
<thead>
<tr>
<th>Use</th>
<th>Potential</th>
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<tr>
<td>Yes</td>
<td>No</td>
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<td>22</td>
<td>105</td>
</tr>
<tr>
<td>51</td>
<td>34</td>
</tr>
</tbody>
</table>

4. Behavior Modification and Resident Evaluation

(a) To show employees behavior modification techniques and applications

<table>
<thead>
<tr>
<th>Use</th>
<th>Potential</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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<tr>
<td>99</td>
<td>46</td>
</tr>
<tr>
<td>82</td>
<td>19</td>
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</tbody>
</table>

(b) To show progress of individual residents as a result of behavior modification

<table>
<thead>
<tr>
<th>Use</th>
<th>Potential</th>
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<tr>
<td>Yes</td>
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<tr>
<td>82</td>
<td>54</td>
</tr>
<tr>
<td>85</td>
<td>15</td>
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</table>

(c) For examples of illegal or prohibitive aversive techniques

<table>
<thead>
<tr>
<th>Use</th>
<th>Potential</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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<tr>
<td>21</td>
<td>109</td>
</tr>
<tr>
<td>85</td>
<td>42</td>
</tr>
</tbody>
</table>

(d) To show proper and improper use of restraints

<table>
<thead>
<tr>
<th>Use</th>
<th>Potential</th>
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<tbody>
<tr>
<td>Yes</td>
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<tr>
<td>16</td>
<td>114</td>
</tr>
<tr>
<td>91</td>
<td>32</td>
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</tbody>
</table>

(e) To record individual residents progress or regression

<table>
<thead>
<tr>
<th>Use</th>
<th>Potential</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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<tr>
<td>18</td>
<td>67</td>
</tr>
<tr>
<td>88</td>
<td>24</td>
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</table>

(f) To determine social skill development of individual residents

<table>
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<th>Use</th>
<th>Potential</th>
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<tbody>
<tr>
<td>Yes</td>
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<tr>
<td>45</td>
<td>81</td>
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<tr>
<td>82</td>
<td>30</td>
</tr>
</tbody>
</table>
4. Behavior Modification and Resident Evaluation (continued)

(g) To show residents their own behavior as well as expected behavior

(h) To positively reinforce the residents' behavior

(i) Group therapy with the residents

5. Public Relations and Civic Groups

(a) For the purpose of recruiting volunteers and new employees for the institution

(b) To obtain sub-contract work from local business for sheltered workshop activities

(c) To inform civic groups of institutional needs and progress reports

(d) To gain financial support and community involvement in institutional activities

(e) To show prospective employees the capabilities of the retarded and the advantages of hiring them

(f) To further inform the public concerning the mentally retarded
<table>
<thead>
<tr>
<th>Use</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td><strong>5. Public Relations and Civic Groups (continued)</strong></td>
<td></td>
</tr>
<tr>
<td>(g) To inform the local community of the institution's role and service to society</td>
<td>34</td>
</tr>
<tr>
<td><strong>6. Uses in Vocational Education and Sheltered Workshops</strong></td>
<td></td>
</tr>
<tr>
<td>(a) To determine proper use of tools</td>
<td>6</td>
</tr>
<tr>
<td>(b) To teach shop safety</td>
<td>7</td>
</tr>
<tr>
<td>(c) To show residents how they work</td>
<td>13</td>
</tr>
<tr>
<td>(d) To demonstrate a skill such as sorting, wrapping, counting, etc.</td>
<td>9</td>
</tr>
<tr>
<td>(e) To show how to sort according to shapes and sizes</td>
<td>7</td>
</tr>
<tr>
<td>(f) To show different operations in production or assembly work</td>
<td>7</td>
</tr>
<tr>
<td>(g) To teach shop cleanup and neatness</td>
<td>6</td>
</tr>
<tr>
<td>(h) To teach personal grooming, proper dress, and behavior while working</td>
<td>18</td>
</tr>
<tr>
<td><strong>7. Recreation, Special Events and Physical Education</strong></td>
<td></td>
</tr>
<tr>
<td>(a) For televising sports activities such as ball games, track, etc.</td>
<td>49</td>
</tr>
</tbody>
</table>
7. Recreation, Special Events and Physical Education (continued)

<table>
<thead>
<tr>
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<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>36</td>
<td>94</td>
</tr>
<tr>
<td>42</td>
<td>87</td>
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<tr>
<td>13</td>
<td>114</td>
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<tr>
<td>19</td>
<td>108</td>
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<tr>
<td>22</td>
<td>105</td>
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<tr>
<td>40</td>
<td>88</td>
</tr>
<tr>
<td>39</td>
<td>93</td>
</tr>
</tbody>
</table>

8. Program Evaluation

<table>
<thead>
<tr>
<th>Use</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>34</td>
<td>99</td>
</tr>
<tr>
<td>39</td>
<td>93</td>
</tr>
<tr>
<td>24</td>
<td>106</td>
</tr>
</tbody>
</table>
8. Program Evaluation (continued)

(d) As an observational tool for program performance evaluation

(e) For development of individual habilitation programs for your residents

(f) To indicate individual progress in a program

(g) To indicate individual program change as needed

9. Dissemination of Administrative Information

(a) For superintendent's report of new policy changes effecting all employees

(b) For major program developments at the institution

(c) For special events at the institution, such as visiting dignitaries

(d) Administrative requests for employee participation in a scheduled activity

(e) As a means of improving communication to all employees on all shifts

(f) As a means of feedback to administration of program evaluation and progress

Use Potential

Yes No N/R Yes No N/R

(d) 48 84 20  88 33 31

(e) 39 93 20  85 39 28

(f) 61 75 16  84 31 37

(g) 40 96 16  88 36 28

(a) 24 105 23  75 51 26

(b) 37 94 21  84 39 29

(c) 49 79 24  67 46 39

(d) 18 108 26  57 72 23

(e) 59 93 0  72 48 32

(f) 30 96 26  73 51 28
10. Parent Education

(a) To provide information for parents who are about to commit their children to your facility concerning the care, treatment, and education offered for them by your facility

(b) To provide information to parents about residents who are already receiving services

(c) To show those persons who are about to become residents what life at the institution is like

(d) Counselling with parents about problems of coping with their children

(e) For having parent group meetings to show videotapes of programs in which residents participate

(f) To teach parents behavioral analysis principles and applications

11. Film Duplication and Entertainment Purposes

(a) Commercial TV films rebroadcast on closed circuit for the residents

(b) For special events occurring on grounds then filmed
11. Film Duplication and Entertainment Purposes (continued)

<table>
<thead>
<tr>
<th></th>
<th>Use</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>(c) To show educational films such as &quot;Sesame Street&quot;</td>
<td>42</td>
<td>85</td>
</tr>
<tr>
<td>(d) To re-broadcast cartoons and puppet shows</td>
<td>22</td>
<td>100</td>
</tr>
<tr>
<td>(e) To build up a library of videotapes for special showings</td>
<td>70</td>
<td>61</td>
</tr>
<tr>
<td>(f) Direct use of commercial television for residents to view for entertainment</td>
<td>61</td>
<td>67</td>
</tr>
</tbody>
</table>

12. Surveillance

<table>
<thead>
<tr>
<th></th>
<th>Use</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>(a) To monitor wards or classes in cottage</td>
<td>13</td>
<td>117</td>
</tr>
<tr>
<td>(b) Surveillance monitoring on all shifts</td>
<td>3</td>
<td>124</td>
</tr>
<tr>
<td>(c) To monitor recreation and playground areas</td>
<td>7</td>
<td>120</td>
</tr>
<tr>
<td>(d) To survey large group activities for control and supervision with fewer staff</td>
<td>6</td>
<td>123</td>
</tr>
</tbody>
</table>

What do you consider the major obstacles to using VTR more fully at your institution?

<table>
<thead>
<tr>
<th></th>
<th>Staff</th>
<th>Equipment</th>
<th>Training</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>N/R</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>99</td>
<td>27</td>
<td>26</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>54</td>
<td>49</td>
<td>49</td>
<td>30</td>
</tr>
</tbody>
</table>
What do you consider the major obstacles to using VTR more fully at your institution?

<table>
<thead>
<tr>
<th></th>
<th>Use</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Facility Space</td>
<td>36</td>
<td>45</td>
</tr>
<tr>
<td>Maintenance</td>
<td>42</td>
<td>40</td>
</tr>
<tr>
<td>Other</td>
<td>21</td>
<td>22</td>
</tr>
</tbody>
</table>

The final survey revealed that the institutions used videotape recording for orientation and in-service training more than for any other application. Also, the response was the highest indicated for potential in this category as well.

The following list is ranked in terms of the number of yes responses in each of the twelve categories for present use of videotape recording by the institutions:

1. Orientation and In-service Training
2. Teaching Aid and Classroom Instruction
3. Behavior Modification and Resident Evaluation
4. Research Counselling and Clinical Psychology
5. Program Evaluation
6. Film Duplication and Entertainment Purposes
7. Recreation, Special Events and Physical Education
8. Dissemination of Administrative Information
9. Public Relations and Civic Groups
10. Parent Education
11. Uses in Vocational Education and Sheltered Workshops

12. Surveillance

Yes responses for the potential for use in the categories are as follows:

1. Orientation and In-service Training
2. Research Counselling and Clinical Psychology
3. Public Relations and Civics Groups
4. Uses in Vocational Education and Sheltered Workshops
5. Behavior Modification and Resident Evaluation
6. Recreation, Special Events and Physical Education
7. Teaching Aid and Classroom Instruction
8. Program Evaluation
9. Dissemination of Administrative Information
10. Film Duplication and Entertainment Purposes
11. Parent Education
12. Surveillance

The major obstacles were listed as:

<table>
<thead>
<tr>
<th>Use</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Equipment</td>
<td>1. Funding</td>
</tr>
<tr>
<td>2. Staff</td>
<td>2. Staff</td>
</tr>
<tr>
<td>3. Funding</td>
<td>3. Equipment</td>
</tr>
<tr>
<td>4. Training</td>
<td>4. Maintenance</td>
</tr>
<tr>
<td>5. Maintenance</td>
<td>5. Training</td>
</tr>
<tr>
<td>6. Facility Space</td>
<td>6. Facility Space</td>
</tr>
</tbody>
</table>
For obstacles listed under "other" (7) two specific obstacles were written in. The two obstacles were equipment compatibility, and portability of equipment.

The final survey indicated there is a broad use of videotape recording in institutions for the mentally handicapped. However, of the total responses only 40% responded affirmatively for using videotape recording for the 88 applications whereas the response for not using videotape recording for these applications was 60%. The survey further indicated 78% replied there was potential for the use of videotape recording in the 88 specific applications mentioned and 22% did not see a potential for its use.

The following are some quotations received along with the questionnaire, which in the writer's opinion are an indication of obstacles, problems, and conditions:

1. "Our equipment is outdated and overused...we have applied for a federal grant to build a color-closed circuit TV system that will give us capacity to be involved in about every activity the survey indicates."

2. "We really lack staff, equipment and know-how."

3. "At present we have one AV system - recently obtained from another facility - we have no trained AV operators."

4. "Staff attitude concerning the use of VTR must change. There are some within the institution that are beginning
to see the potential. Hopefully it will spread to others."

5. "We have no equipment, but it has a great variety of uses, and would be used by staff if we had it. We do occasionally borrow equipment."

6. "Our equipment is borrowed from our main division office otherwise, we would utilize videotape equipment a good percentage of the time. Hopefully, additional funding and grants recently approved will provide us with the equipment that we so desperately need!"

7. "We do not currently possess equipment but we are planning to purchase camera and videotape recorder in near future."

8. "I got several valuable ideas on new ways to use our VTR just from this questionnaire, thanks."

9. "I feel that tax-funded institutions have yet to realize the value of video tape. The funding for equipment takes years to accomplish...the potential in an institution for the retarded is unlimited and hopefully in future years will come about."

10. Another said, "As I see it the potential for the use of videotape facilities is unlimited. However, your questionnaire dealt with the now."

11. "I enjoyed your preliminary survey data - found it most interesting and practical, thanks."

12. As a Media Specialist, I am interested in data on the kinds of equipment being used (with reference to compatibility and setting up a system
of exchanging tapes) and extent of actual use! It has been my experience that the majority of institutions get a grant of some kind, buy the hardware, discover how expensive it is to use and maintain, go into shock over the paucity of software, and wind up letting the equipment gather dust. If the results of your work could help to overcome these problems, it would be truly worthwhile.

13. The following bit of practical advice was also offered: "If your TV set doesn't work, check the plug before you call a service man."
CHAPTER V
SUMMARY AND CONCLUSIONS

PURPOSE

The writer believed there was first a need to determine the present and potential scope of the use of videotape recording in institutions for the mentally handicapped, as well as some of the obstacles encountered in its use. Second, the writer believed a need existed for the presentation and dissemination of ideas for the use of videotape recording for more than one group or setting within institutions for the mentally handicapped. Third, it was the writer's intention to provide some specific educational applications for videotape recording in the institutions for the mentally handicapped (which may or may not be used at the present time). Hopefully, this effort will result in videotape recording being used to greater advantage, thus providing improved opportunity for maximum educational development of the residents of institutions for the mentally handicapped. Therefore, this exploratory study was undertaken.

PROCEDURE

The methods used to accomplish the task and gather data for this study were:
(a) Review the literature to date

(b) Conduct a preliminary survey of both state and private institutions for the mentally handicapped

(c) Personal visits for observation at selected institutions

(d) Study of a model vocational education program at an institution at Orient, Ohio which used videotape recording extensively in the program

(e) A final survey of the institutions to add precision to the findings, update the study of applications, discover potential for future applications, and to determine obstacles to the uses of videotape recording in institutions for the mentally handicapped.

FINDINGS AND DISCUSSION

The related literature study revealed that only 16 references pertained specifically to the mentally handicapped, and only 4 of these to residents of institutions for the mentally handicapped.

The preliminary survey of both state and private institutions for the mentally retarded was conducted, with a 73% response from the 218 institutions contacted. This survey revealed there were 12 general categories of use for videotape recording in the institutions. These categories were used in the final survey to gather more specific information. The following categories are ranked according to the greatest percentage of institutions using videotape recording for each category ranging from 60% for the first category listed to 1.9% of the institutions
using videotape recording for the last category listed.

1. Orientation and In-service Training
2. Teaching Aid and Classroom Instruction
3. Research, Counselling and Clinical Psychology
4. Behavior Modification and Resident Evaluation
5. Public Relations, Civic Groups, Orientation, and Special Events
6. Vocational Education
7. Field Trips, Recreational Events, and Physical Education
8. Program Evaluation
9. Dissemination of Administrative Information
10. Parent Education
11. Film Duplication and Entertainment Purposes
12. Surveillance

Personal visitations were made to four institutions in the State of Ohio, one in Illinois, and one in Connecticut. The purpose of these visits was to gain first hand knowledge and make direct observations concerning the uses of videotape recording in these selected institutions.

To supplement these visitations, a study of a model vocational education program was conducted. This program used videotape recording extensively as an integral part of the program operation. Videotape recording was used for classroom instruction, in-service training of both instructional staff and institutional employees who supervised the residents at their work while receiving on the
job training, and for longitudinal studies to determine the residents' progress.

The final survey was conducted to add precision to the findings, update the study of applications, discover potential for future applications, and indicate some obstacles to the use of videotape recording in institutions for the mentally handicapped. There was a 72% response to this questionnaire, which contained 88 specific uses or applications of videotape recording under the 12 major categories indicated by the preliminary survey.

The final survey indicates an optimistic potential for future use of videotape recording in institutions. Of the eighty-eight questions, there were only four indicating fewer yes potential responses, than yes use responses. The surveillance category was the only category which did not indicate a strong use for, or potential use for videotape recording. However, even in this category the potential use was greater than the number of institutions indicating use of videotape recording at the present time for this purpose.

The final survey indicated the major obstacles for both the use of videotape recording and the potential for its use were equipment, staff, and funding. Two other obstacles mentioned were equipment portability and equipment compatibility.
Based upon the final survey, selected specific applications of videotape recording for institutions for the mentally handicapped are presented under the following headings:

1. Applications for Parents and Community Groups
2. Applications for Institutional Staff
3. Applications for Institutional Residents

APPLICATIONS FOR PARENTS AND COMMUNITY GROUPS

Some institutions for the mentally retarded have made use of videotape recording to educate and inform not only parents of the residents but community and civic groups as well. The preliminary survey of the 218 institutions indicated that 13 of the 160 institutions responding to the questionnaire were using videotape recording for the purpose of educating or informing parents, and 48 for public relations with community groups concerning the institution or the residents of the institution.

The final survey showed a total of 39 institutions were using videotape recording to show parents programs in which residents participate, and 39 institutions were using videotape recording to further inform the general public concerning the mentally retarded. This would seem to indicate between the preliminary and final survey there was an increase in the number of institutions utilizing videotape recording for the purpose of educating and informing parents and community groups concerning institutions or residents of the institutions.
One institution in cooperation with the local police department developed some training videotapes to be used for in-service training of officers who are required to cope with, and counsel suspects who are mentally ill, mentally retarded, or emotionally disturbed. This was one of the more unique educational ways reported of an institution using videotape recording for civic or community groups. The final survey indicated fewer institutions were using videotape recording for showing prospective employers the capabilities of the retarded and the advantages in hiring them, than in any other specific use in this category. However, 100 institutions indicated "yes," for potential future use for this specific application.

APPLICATIONS FOR INSTITUTIONAL STAFF

Ways indicated by the surveys in which videotape recording can be used for the benefit of institutional staff members by category are:

1. Orientation and In-service Training
2. Teaching Aid and Classroom Instruction
3. Research Counselling and Clinical Psychology
4. Behavior Modification and Resident Evaluation
5. Program Evaluation
6. Dissemination of Administrative Information
7. Surveillance

More institutions reported the use of videotape recording for orientation and in-service training than for
use in any other category. They also indicated it was the highest in potential for future use as well.

In the orientation of new employees much can be accomplished with videotape to familiarize them with the policies, programs, scope, and operation of the entire institution as well as teaching specific skill training applicable to resident care. This final survey revealed that the institutions were using videotape recording more for workshops for staff development (97) than for the other applications in this category. The survey also showed the highest potential for two specific uses of videotape recording to be: first, showing new employees the various departments of the institution and how these contribute to the services provided the residents (105), and second, to inform new employees of their duties and what is expected of them (103). However, only 43 of the institutions were presently using videotape recording for these specific purposes, in spite of the high potential indicated.

Two unexpected results were the low potential indicated for the category of teaching aid and classroom instruction. The highest response for potential specific use was 84 yes responses for teacher evaluation and training. The lowest use of videotape recording in this category was 28 presently using videotape recording for
teaching specific hand skills to the residents. However, 81 of the institutions indicated this as a future potential use. This was the second highest potential use reported for a specific use in the category of teaching aid and classroom instruction.

It was found that in the category of research counselling and clinical psychology, the highest use was for analysis of residents with 73 institutions reporting utilizing videotape recording in this way. The lowest use in this category was for counselling with residents, with 25 institutions indicating present use. The highest potential use was for observation and evaluation of gross motor skills and coordination (97). The lowest potential for use was to let the residents see themselves as others see them, and for analysis of residents.

In the category of behavior modification and resident evaluation the highest specific use was to show employees behavior modification techniques and applications (99). The lowest specific use reported in this category was to show proper and improper use of restraints. However, the highest potential use was for this specific application of showing the proper and improper use of restraints (91). The lowest potential use indicated (70) was for group therapy with the residents.

For the program evaluation category it was found that the highest use was to indicate individual progress
in a program (61) rather than to determine new goals for program development on the basis of longitudinal records (24). The highest potential use in this category was, however, to evaluate programs at the institution through longitudinal studies (91), rather than to indicate individual progress in a program (84).

For dissemination of administrative information, the highest specific present use by the institutions was found to be for special events at the institutions, such as visiting dignitaries (49). The highest potential indicated was for major program developments at the institution (84).

The surveillance category was the lowest in the number of responses for present specific uses. For the four specific uses listed, there was a total of 29 altogether. Also, this was the lowest of all the categories for potential use with a total of 133 responses for the four items listed. By comparison, there was 386 negative responses for this potential use. This could be a result of the "big brother is watching" syndrome, because the greatest institutional use (13) was to monitor wards or classes in cottages and the highest potential for a specific use (36) was to monitor recreation and playground areas.
APPLICATIONS FOR RESIDENTS

In considering the use of videotape recording for the benefit of residents, three of the twelve categories used for the surveys are considered:

1. Use in Vocational Education and Sheltered Workshop

2. Recreation, Special Events, and Physical Education

3. Film Duplication and Entertainment Purposes

The highest specific use in the category of uses in vocational education and sheltered workshops was to teach personal grooming, proper dress, and behavior while working (18). The highest potential for specific use was to demonstrate proper use of tools, and show the residents how they work (96). One unexpected result in this category was that institutions were using videotape recording for vocational education and sheltered workshops less than for any other use except the surveillance category. However, the final survey on potential uses in this category indicated a greater difference between present use and potential for use than any other category. This seems to indicate a strong interest in future use of videotape recording for the specific uses in this category.

In the category of recreation, special events and physical education, the highest use by the institutions was for televising sports activities such as ballgames,
track, etc. (49). The greatest number of institutions indicating a potential for use in this category was in the specific use of teaching recreational activities and gross motor development (93).

The final survey revealed in the category of film duplication and entertainment purposes, the highest institutional use of videotape recording was for the specific purpose of building up a library of videotapes for special showings (70). This highest potential for use was for special events filmed and shown at various times to the residents (72) followed by showing educational films such as "Sesame Street," (70).

**IMPLICATIONS AND RECOMMENDATIONS**

Evidence from the literature, the two institutional surveys, personal visits to selected representative institutions, close observation and study of the Orient, Ohio, model vocational education program which utilizes videotape recording so extensively, all indicate there are undeniable advantages in using videotape recording for many instructional applications for the institutionalized mentally handicapped.

Possibly more institutions for the mentally handicapped should implement programs which prepare the residents for employment and life in the community away from the institutions, and utilize videotape recording more extensively in such programs.
One of the strongest arguments for the use of videotape recording for the institutionalized mentally handicapped is that the most effective communication possible should be utilized for their educational activities. It is for this reason that many researchers advocate an increased use of videotape recording in the training of this group of handicapped individuals.

Indications are that an increased use of videotape recording is taking place in the institutions, and that this expansion of its use will continue, thus providing improved opportunities for maximum development of the residents of these institutions. Further research in this area is needed to lay a sound basis for supporting and continuing increased use of videotape recording in these institutions.

This study represents the current status of the use of videotape recording in approximately three-fourths of the institutions for the mentally handicapped existing in the United States and Canada according to the National Association of Coordinators of State Programs for the Mentally Retarded, Inc. The data gathered applies only to that group who responded to the surveys (approximately 75%) and not to the total number of institutions or to the group of institutions representing the 25% who did not respond to the surveys for this study.
The use of videotape recording is rather extensive and appears to involve all disciplines and areas of the institutions surveyed. However, in spite of this, many institutions are using videotape recording in limited ways or for few applications. The dissemination of the data from this study, along with some specific guidelines, may contribute to, and result in, the increased use of videotape recording in the institutions serving the mentally handicapped. There is an indicated need for guidelines in the use of videotape recording for the variety of uses or applications presented in this study. Hopefully, future research and development will provide such guidelines. One other area recommended for future research and study is in the category of surveillance. This area has many implications other than educational or instructional which should be researched in terms of possible advantageous use of videotape recording.

Presented in this study are some specific applications of videotape recording for the benefit of three groups:

1. Parents and Civic or Community Groups
2. Institutional Employees
3. Residents of Institutions for the Mentally Handicapped

The scope of this study, the variety of applications indicated, and the suggested uses has been broad
enough to meet the needs of any institution that has videotape recording equipment no matter what the population or programs might be. Videotape recording can be adapted to a variety of conditions and the versatility of its utilization for instructional purposes can be a great asset in the education and training of the mentally handicapped residents in institutions.
Appendix A

Preliminary Survey Letter
Dear

I am engaged in research to determine the extent to which videotape recording is being used in institutions for the mentally retarded.

As a doctoral candidate from Ohio State University with an interest and working knowledge in the use of videotape recording for institutional applications and being employed as a Vocational Education Project Director at an institution for the mentally retarded, it was felt that the extent of the use of videotape recording and information concerning its applications in working with retarded individuals would be of value. I therefore undertook the task for my dissertation.

A total of forty three states are involved with the survey. Your institution was selected as representative of your State, if you will provide the desired information this one time.

Would you or another of your staff whom you feel qualified, please fill in the blanks on the attached questionnaire and return it to me in the enclosed self addressed envelope? The information will be held in confidence and not used in any way except for data compilation for the dissertation and will not reflect adversely as there will not be a comparison made between states or institutions.

If you would like to have a copy of the completed dissertation please check the last question in the yes column and when the work is completed a copy will be sent to you for participating in this endeavor.

Your cooperation is urgently requested and greatly appreciated. It will take only a few minutes to provide the answers to the questions enclosed, which are needed to make this work a success.

Thank you sincerely for your assistance and prompt reply.

Lee Eytchison
Project Director

RLE:bs

- 109 -
Videotape Recording Survey

1. Are you using videotape recording equipment at your institution now?  
   Yes____ No____
   Have you used it in the past? Yes____ No____
   If not using it why? Explain: ______________________________

2. Is it used for classroom instruction only? Yes____ No____
   Explain: ______________________________

3. What departments use the videotape recording equipment? 
   ______________________________

4. What type of videotape recording equipment do you have? Please describe: 
   ______________________________

5. What was the approximate original cost? 
   ______________________________

6. Is your videotape recording system portable? Yes____ No____

7. If you do not have videotape recording equipment now do you plan to get it in 
   the near future? Yes____ No____

8. Do you feel it would benefit your institution to have this type of equipment? 
   Yes____ No____

9. How could it be of benefit to your institution, or how would you use it? Explain: 
   ______________________________

   - 111 -
10. Were your personnel professionally trained to operate the equipment? Yes _______  
No _______ Before the equipment was obtained, or after? _______________________

11. What do you consider the greatest advantage to your institution in using videotaping equipment? Explain: ________________________________  
____________________________________________________________________  
____________________________________________________________________  
____________________________________________________________________  
____________________________________________________________________  

12. Do you have a Vocational Education Program at your institution? Yes _______  
No _______

13. Do you use videotape recording in your Vocational Education Program? Yes _______  
No _______

14. If yes describe briefly how it is used. (Demonstrations, regular classroom instruction, individual reinforcement, etc.)  
____________________________________________________________________  
____________________________________________________________________  
____________________________________________________________________  
____________________________________________________________________  

15. Do you have a sheltered workshop at your institution? Yes _______  No _______

16. How is videotape recording used in the sheltered workshop? Used: Yes _______  
No _______ How? Explain: ____________________________________________________________________  
____________________________________________________________________  
____________________________________________________________________  
____________________________________________________________________  

17. What do you consider the greatest disadvantage in using videotape recording.  
____________________________________________________________________  
____________________________________________________________________  
____________________________________________________________________  
____________________________________________________________________
18. Would you have a need for a copy of the results of this survey? Yes__

No____

Of the completed dissertation. Yes____ No____

19. Please comment on any area of the use of videotape recording not covered by this survey or as it applies to your institution.
Appendix C

Preliminary Survey Graph
Appendix D

Final Survey Letter
Enclosed is a copy of the data summary as a result of the survey in which you participated concerning the use of videotape recording in institutions for the retarded. Your assistance and patience was greatly appreciated.

Enclosed also is the final survey questionnaire to which I would like to call your immediate attention.

The information gathered was of a general nature and proved valuable in that it was essential information not published to date. By obtaining the specific information requested in the enclosed survey, the final study will be of much more importance to you and constitute a significant contribution to the shared knowledge in the field of videotape recording for the mentally handicapped. In the original survey, many expressed a desire for the type of specific information requested at this time. Your assistance will not only let others know what you are doing, but it will provide you with information concerning others' activities which can be a great asset to you in your work with videotape recording.

This enclosed final survey will take you only a few minutes to complete by checking the yes or no response to the questions. The self-addressed, stamped envelope is for your prompt return so that these results can be included in the final draft of the dissertation, which will complete the study. A summary of the current specific data from this final questionnaire will be sent to you in the very near future. Your participation in the enclosed survey is very important for the final results.

Thank you again for your assistance and cooperation in making this a meaningful and successful study.

Sincerely,

Lee Axtschoss, Program Director
Vocational Education Department

LE:dd
Appendix E

Final Survey
QUESTIONNAIRE

With your present capabilities, are you using videotape recording in the following ways, and do you see a potential for its use in these applications without any additional equipment or staff? Please indicate with a yes or no in each column.

<table>
<thead>
<tr>
<th>Use</th>
<th>Potential</th>
</tr>
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<tbody>
<tr>
<td>Yes or No</td>
<td>Yes or No</td>
</tr>
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</table>

1. ORIENTATION AND IN-SERVICE TRAINING

   (a) To show new employees the various departments of the institution and how they contribute to the services provided to the residents

   (b) To inform new employees of the needs and characteristics of the residents they care for

   (c) To inform new employees of their duties and what is expected of them

   (d) For fire drill and safety instruction

   (e) For showing techniques of performing job skills

   (f) To keep staff informed on latest information available in their respective fields

   (g) To inform volunteer workers of their role as volunteers

   (h) To record guest lectures such as documentary or professional presentations

   (i) Available for staff to use for self-analysis as desired

   (j) Utilized at workshops for staff development

2. TEACHING AID AND CLASSROOM INSTRUCTION

   (a) Used for T.V. lessons in daily classroom instruction

   (b) Used to videotape the residents themselves for some of the lessons

   (c) Used to present commercial education programs for classroom instruction

   (d) Used by the students to produce and act in the lessons presented

   (e) For teacher evaluation and training

   (f) To teach specific hand skills to the residents

   (g) For speech therapy and instruction

   (h) To observe resident students progress in activity participation

3. RESEARCH COUNSELLING AND CLINICAL PSYCHOLOGY

   (a) Used to videotape the residents for case studies

   (b) Use the videotapes for analysis of residents

   (c) To let the residents see themselves as others see them
### 3. RESEARCH COUNSELLING & CLINICAL PSYCHOLOGY (Continued)

- **(d)** Use the videotapes for counselling with the residents
- **(e)** Utilized in resident evaluations for programming
- **(f)** To observe and evaluate gross motor skills and coordination
- **(g)** To show residents acceptable dress and conduct for different occasions in the community
- **(h)** For showing how to apply for a job and interview for employment
- **(i)** To use the interdisciplinary team approach to structure individual programs for residents based upon videotape analysis of the residents' needs

### 4. BEHAVIOR MODIFICATION AND RESIDENT EVALUATION

- **(a)** To show employees behavior modification techniques and applications
- **(b)** To show progress of individual residents as a result of behavior modification
- **(c)** For examples of illegal or prohibitive aversive techniques
- **(d)** To show proper and improper use of restraints
- **(e)** To record individual resident's progress or regression
- **(f)** To determine social skill development of individual residents
- **(g)** To show residents their own behavior as well as expected behavior
- **(h)** To positively reinforce the resident's behavior
- **(i)** Group therapy with the residents

### 5. PUBLIC RELATIONS AND CIVIC GROUPS

- **(a)** For the purpose of recruiting volunteers and new employees for the institution
- **(b)** To obtain subcontract work from local business for sheltered workshop activities
- **(c)** To inform civic groups of institutional needs and progress reports
- **(d)** To gain financial support and community involvement in institutional activities
- **(e)** To show prospective employers the capabilities of the retarded and the advantages of hiring them
- **(f)** To further inform the public concerning the mentally retarded
- **(g)** To inform the local community of the institution's role and service to society
6. USES IN VOCATIONAL EDUCATION & SHELTERED WORKSHOPS

<table>
<thead>
<tr>
<th>Yes or No</th>
<th>(a) To demonstrate proper use of tools</th>
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<tbody>
<tr>
<td></td>
<td>(b) To teach shop safety</td>
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<td></td>
<td>(c) To show residents how they work</td>
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<td>(d) To demonstrate a skill such as sorting, wrapping, counting, etc.</td>
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<td></td>
<td>(e) To show how to sort according to shapes and sizes</td>
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<td></td>
<td>(f) To show different operations in production or assembly work</td>
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<td></td>
<td>(g) To teach shop cleanup and neatness</td>
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<td></td>
<td>(h) To teach personal grooming, proper dress, and behavior while working</td>
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</tbody>
</table>

7. RECREATION, SPECIAL EVENTS & PHYSICAL EDUCATION

<table>
<thead>
<tr>
<th>Yes or No</th>
<th>(a) For televising sports activities such as ballgames, track, etc.</th>
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<tbody>
<tr>
<td></td>
<td>(b) To teach recreational activities and gross motor development</td>
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<td></td>
<td>(c) To televise your institution's participation in the annual Special Olympics and physical education</td>
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<td></td>
<td>(d) For Boy Scout and camping out activities</td>
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<td></td>
<td>(e) Ground breaking and dedication ceremonies</td>
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<td></td>
<td>(f) Awards presentations for employees</td>
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<td></td>
<td>(g) Guest entertainers and shows</td>
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<td></td>
<td>(h) To view field trips and other community experiences</td>
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</tbody>
</table>

8. PROGRAM EVALUATION

<table>
<thead>
<tr>
<th>Yes or No</th>
<th>(a) To evaluate programs at the institution through longitudinal studies</th>
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<tbody>
<tr>
<td></td>
<td>(b) Determine strengths and weaknesses of program operations on basis of VTR evidence</td>
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<td></td>
<td>(c) To determine new goals for program development on basis of longitudinal record</td>
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<td></td>
<td>(d) As an observational tool for program performance evaluation</td>
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<td></td>
<td>(e) For development of individual habilitation programs for your residents</td>
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<tr>
<td></td>
<td>(f) To indicate individual progress in a program</td>
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<tr>
<td></td>
<td>(g) To indicate individual program change as needed</td>
</tr>
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</table>

9. DISSEMINATION OF ADMINISTRATIVE INFORMATION

<table>
<thead>
<tr>
<th>Yes or No</th>
<th>(a) For superintendent's report of new policy changes effecting all employees</th>
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<tbody>
<tr>
<td></td>
<td>(b) For major program developments at the institution</td>
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<td></td>
<td>(c) For special events at the institution, such as visiting dignitaries</td>
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</table>
9. DISSEMINATION OF ADMINISTRATIVE INFORMATION (continued)

(d) Administrative requests for employee participation in a scheduled activity
(e) As a means of improving communication to all employees on all shifts
(f) As a means of feedback to administration of program evaluation and progress

10. PARENT EDUCATION

(a) To provide information for parents who are about to commit their children to your facility concerning the care, treatment and education offered for them by your facility
(b) To provide information to parents about residents who are already receiving services
(c) To show those persons who are about to become residents what life at the institution is like
(d) Counselling with parents about problems of coping with their children
(e) For having parent group meetings to show videotapes of programs in which residents participate
(f) To teach parents behavioral analysis principles and applications

11. FILM DUPLICATION AND ENTERTAINMENT PURPOSES

(a) Commercial TV films re-broadcast on closed circuit for the residents
(b) For special events occurring on grounds then filmed and shown at various times to the residents
(c) To show educational films such as "Sesame Street"
(d) To re-broadcast cartoons and puppet shows
(e) To build up a library of videotapes for special showings
(f) Direct use of commercial television for residents to view for entertainment

12. SURVEILLANCE

(a) To monitor wards or classes in cottages
(b) Surveillance monitoring on all shifts
(c) To monitor recreation and playground areas
(d) To survey large group activities for control and supervision with fewer staff
What do you consider the major obstacles to using VTR more fully at your institution?

<table>
<thead>
<tr>
<th>Use</th>
<th>Potential</th>
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<tbody>
<tr>
<td>Yes or No</td>
<td>Yes or No</td>
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<tr>
<td>Staff</td>
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<td>Equipment</td>
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<td>Training</td>
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<td>Funding</td>
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<tr>
<td>Facility space</td>
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<tr>
<td>Maintenance</td>
<td></td>
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<tr>
<td>Other</td>
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</tbody>
</table>

For data compilation purposes and to provide you with follow-up information, please provide the name and address of your institution. This will remain confidential and anonymous. Your institution will not be identified in any way. Thank you sincerely.

Institution Name: __________________________________________________________

Address: _________________________________________________________________

Do you wish a copy of the summary?  Yes ____  No ____
Appendix F

Final Survey Graph
Appendix G
Sample Curriculum
SAMPLE CURRICULUM

I. Reading and Language
   (Communicative skills)
   a. Recognition of common words
      1. his name
      2. colors
      3. days of weeks, months
         holidays
      4. common objects; people
         and places
   b. Communicating experiences
      and needs
   c. Greeting and manners
   d. Use of telephone
   e. Word concepts; in-out,
      up-down, etc.

II. Arithmetic - Number Concepts -
    Common Learning
   a. Daily schedule
   b. Number concepts, 1-5, 5-10
      group recognition
   c. Days of weeks, sequences,
      holidays, seasons
   d. Differences: short-tall,
      many-few, etc.
   e. Telling time - morning,
      noon, night, hour
   f. Denominations of money
   g. Shapes - matching and
      recognition
h. Left and right
i. Folding and stacking

III. Science - Sense Training - Understanding

a. Colors - matching and relationships - grass, etc.
b. Sounds - animals, birds, machines
c. Animals and nature - recognition and categories
d. Habitats of living things
e. Seasons and weather
f. The senses - taste, smell, touch, etc.
g. Parts of the body - nose, ears, etc.

IV. Health - Self Care - Home Living - Safety

a. Dressing
b. Cleanliness
c. Brush teeth
d. Blow nose
e. Rest; relaxing
f. Foods - meals and diet
g. Setting and clearing table
h. Washing and drying dishes
i. Shelving (matching canned goods, etc.)
j. Clothing - choice and change
k. Toilet training and cleanliness
l. Preparing simple foods
m. Care of clothing - mending; sewing on buttons
n. Traffic, home, playground safety

V. Physical Education
   a. Basic skills - skip, jump, hop, etc.
   b. Large and small motor developments and coordination through games and activities
   c. Program similar to K-1 level modified

VI. Music
   a. Collated with all other areas
   b. Rhythm instrument play
   c. Singing and rhythmic games

VII. Arts and Crafts
   a. Correlated with activities and topics of other areas; designs, shapes, etc., coloring control, cutting areas, making bulletin boards
   b. Crafts

VIII. Social Adjustment
   a. Motivation
   b. Following directions
c. Sharing - taking turns

d. Responsibilities - helpers

e. Planning and finishing

f. Tolerance for frustration


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<table>
<thead>
<tr>
<th>Title</th>
<th>Address</th>
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<tbody>
<tr>
<td>Educational Television</td>
<td>140 Main Street, Ridgefield, Connecticut 06877</td>
</tr>
<tr>
<td>Education/Instructional Broadcasting</td>
<td>647 North Sepulveda Boulevard, Los Angeles, California 90049</td>
</tr>
<tr>
<td>Books and Pamphlets</td>
<td></td>
</tr>
<tr>
<td>Audio-Visual Equipment Directory</td>
<td>National Audio-Visual Association, 3150 Spring Street, Fairfax, Virginia 22030</td>
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<tr>
<td>Instructional Television - A Utilization Guide for Teachers and Admin</td>
<td>James H. Gaylord, Virginia State Department of Education, Richmond, Virginia 23216</td>
</tr>
<tr>
<td>Instructional Television, Promise and Opportunity by Wilbur Schramm</td>
<td>National Association of Educational Broadcasters, 1346 Connecticut Avenue, Washington D.C. 20036</td>
</tr>
<tr>
<td>Teach with Television by Lawrence F. Costello and George Gordon</td>
<td>Communications Arts Books, Hastings House Publishers, Inc., 10 East 40th Street, New York, New York 10016</td>
</tr>
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<tr>
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<td>McGraw-Hill Book Co., 330 West 42nd Street, New York, New York 10036</td>
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