

AN ANALYSIS OF THE LEVEL OF POTENTIAL USAGE OF AUDIOVISUAL
EQUIPMENT, MATERIALS AND SERVICES AT KANSAS STATE UNIVERSITY

by

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Chapter 1

INTRODUCTION

Background of the Problem

Kansas State University provides audiovisual services at the college and departmental levels. There has been no university wide defined parameters of responsibilities, no resource file of equipment, materials and services, no provision for equipment maintenance and repair, or instructional design. Each college or department has developed separately in these areas in the absence of a campus wide audiovisual program. While some areas have very adequate audiovisual support, others have very little or none.

There has been an increasing demand by faculty members and departmental heads to know where materials and equipment are located on campus, and to have help in problems of repair, maintenance and instructional design of media programs. This demand has led to a study commissioned by the Council of Deans under the auspices of the Vice President for Academic Affairs.

A study was conducted during the 1975-76 academic year to determine the present status of audiovisual equipment and services at Kansas State University. It was felt that an investigation could establish a description of the usage, the development of a resource file, and the determination of the philosophy and needs of the University as a whole. Subsequently, this study could provide a basis for recommendations to solve the

problems associated with audiovisual usage on the campus.

The Vice President of Academic Affairs appointed a committee to begin the investigation. The committee appointed consisted of: Carroll Hess, Chairman, Dean of Agriculture; Dick Owens, Director of Educational Improvement and Innovation; and G. Jay Rausch, Director of Libraries. This investigator served as a graduate assistant under the supervision of Dr. Owens with the responsibility of carrying out the research tasks involved with the investigation. Duties assigned to this investigator included meeting with the committee, conducting the research, obtaining an inventory of equipment and analyzing the data. The committee was given the resulting data and analysis and they made their own assessment and recommendations to the Council of Deans.

In order to properly investigate the status of audiovisual usage, evaluation and philosophy at Kansas State University, it was necessary to first determine the separate departmental policies, procedures, and the underlying philosophies regarding audiovisual usage. The study was conducted in three phases.

Phase I

This consisted of an attempt to identify the equipment used, the personnel involved in audiovisual support, the future equipment and services needs; equipment, materials, and service accessibility; the extent of sharing and borrowing with other departments; equipment available for loan; how repair and

maintenance; and finally, the departments' philosophy about University involvement in audiovisual support.

Phase II

Next it was felt a sampling of faculty, where the usage was occurring would help to determine with greater accuracy the extent of usage, the potential of usage, a description of the facility that provides audiovisual support, the borrowing and accessibility to equipment, materials and services, conditions that encouraged or discouraged audiovisual usage, and finally their feeling about University involvement.

Phase III

Finally an inventory was made of audiovisual equipment. Information was obtained from the University inventory files.

Statement of the Problem

The problem of this study was to identify the pattern of usage of audiovisual materials and equipment at Kansas State University. The patterns were examined in relationship to size of class (small, medium, and large), type of class (lecture, laboratory, or recitation), and level of instruction (lower, upper, or graduate division). Therefore, specific problem tasks were to identify frequency of audiovisual usage according to type, size and level of class. Because variables such as: equipment available, services available, classroom conditions, technical assistance available, can influence actual usage a

picture of usage was obtained based on potential usage if all variables were optimum.

Statement of the Hypotheses

- I. The level of frequency of potential usage of audiovisual equipment and materials will not differ significantly due to size of class (small, medium or large).
- II. The level of frequency of potential usage of audiovisual equipment and materials will not differ significantly due to types of class (laboratory, lecture, recitation).
- III. The level of frequency of potential usage of audiovisual equipment and materials will not differ significantly due to levels of instruction (lower, upper and graduate division).

Operational Definition of Terms

Frequency of usage is defined as how often audiovisual equipment is used in class sessions and/or in preparation in six degrees of usage: most class sessions; three-fourths of class sessions; one-half of class sessions; one-fourth of class sessions; occasionally; and never.

Audiovisual equipment is defined as devices that employ sight and/or sound in an information flow. See Appendix B for a complete list of items.

Audiovisual materials is defined as stored information in

various formats that are designed to use in conjunction with audiovisual equipment. See Appendix B for a complete list of items.

Audiovisual services is defined as the production of audiovisual materials and the operation of equipment. See Appendix B for a complete list of services.

Instructional technology is defined as the process which employs audiovisual equipment, materials, and services.

Actual usage is defined as the current level of usage of audiovisual equipment and materials.

Potential usage is defined as the level of usage of audiovisual equipment and materials if accessibility, classroom conditions and technical assistance were optimum.

Size of class is broken down into three categories: Small (1-19 students), Medium (20-99 students), and Large (100 and over students).

Type of class is broken down into three categories using the university classification of course type.

Laboratory - the class hours exceed the credit hours and requires special equipment and facilities.

Lecture - class hours equal the credit hours and is generally considered primarily a one way flow of information.

Recitation - class hours equal credit and there is presumed to be extensive interaction between students and instructor.

Level of instruction also used university classification by course numbers: Lower division, Freshman-Sophomore (000-299), Upper division, Junior-Senior (300-699), and Graduate division (700-999).

Classroom conditions refers to situations conducive for audiovisual usage such as proper seating, lighting, screens, etc.

Accessibility shall refer to the ability to obtain, with relative ease, the desired equipment and materials.

Technical assistance is help provided for faculty ranging from simple operation of equipment to instructional design of audiovisual programs.

Educational media is defined as the use of audiovisual equipment, materials and services.

Chapter 2

REVIEW OF LITERATURE

Only a few studies in the general field of evaluation of instructional media programs in higher education have been reported in the literature. A search of Doctoral Dissertations, Educational Journals, and educational documents revealed only a few such studies which have been done. A search by computer of the ERIC system (Educational Resources in Education) indicated 140 references. Of these, only the references discussed here are related to this study. There was nothing concerning an evaluation and analysis of the pattern of actual or potential usage of audiovisual materials or services in higher education by surveying classes. Any attempts at evaluation of usage surveyed faculty making no distinction between various classes that a faculty member may teach that involve different usage levels. Most of the studies involved evaluation of audiovisual programs that were well established or centralized.

There are, however, two sources of general guidelines in establishing Media Programs in Higher Education. These are the Association for Educational Communication and Technology (AECT) who have developed a standard to follow when establishing a media program in higher education¹ and the Carnegie Commission which has issued recommendations on Instructional Technology in Higher Education. These recommendations are:

¹Avram Rosenthal and others, "Criteria Relating to Educational Media Programs in Junior Colleges", ERIC ED 027 867 (November, 1968), pp. 6-7.

"1. Because expanding technology will extend higher learning to large numbers of people who have been unable to take advantage of it in the past, because it will provide instruction in forms that will be more effective than conventional instruction for some learners in some subjects, because it will be more effective for all learners and many teachers under many circumstances, and because it will significantly reduce costs of higher education in the long run, its early advancement should be encouraged by the adequate commitment of colleges and universities to its utilization and development and by adequate support from governmental and other agencies concerned with the advancement of higher learning.

2. Since a grossly inadequate supply of good quality instructional materials now exists, a major thrust of financial support and effort on behalf of instructional technology for the next decade should be toward the development and utilization of outstanding instructional programs and materials. The academic disciplines should follow the examples of physics and mathematics in playing a significant role in such efforts.

3. Institutions of higher education should contribute to the advancement of instructional technology not only by giving favorable consideration to expanding its use, whenever such use is appropriate, but also by placing responsibility for its introduction and utilization at the highest possible level of academic administration.

4. The introduction of new technologies to help libraries continue to improve their services to increasing numbers of users should be given first priority in the efforts of colleges and universities, government agencies, and other agencies seeking to achieve more rapid progress in the development of instructional technology.

5. We recommend that major funding sources, including states, the federal government, and foundations, recognize not only the potential of new and developing extramural education systems for expanding learning opportunities, but also the crucial role such systems should play in the ultimate development of instructional technologies. Requests of these systems for funds with which to introduce and use new instructional programs, materials, and media should be given favorable consideration.

6. By 1992, at least seven cooperative learning-technology centers, voluntarily organized on a regional basis by participating higher educational institutions and systems should be established for the purpose of sharing costs and facilities for the accelerated development and utilization of instructional technology in higher education.

7. The federal government should assume full financial responsibility for the capital expenditures required initially to establish one cooperative learning-technology center every three years between 1973 and 1992.

8. The federal government should provide at least one-third of the funds required for the operation of cooperative learning-technology centers for the first ten years of their operation.

9. The federal government should continue to provide a major share of expenditures required for research and development in instructional technology and for introduction of new technologies more extensively into higher education at least until the end of the century. The total level of federal government support for these purposes should be at least \$100 million in 1973 and should rise to 1 percent of the total expenditures of the nation on higher-education by 1980.

10. The proposed National Foundation for Post-secondary Education and the proposed National Institute of Education should be established, and the proposed National Foundation for Post-secondary Education should be assigned responsibility for administering loans and the provision of capital investment funds and grants for the utilization of instructional technology. Grants to support research and development activities in the field of instructional technology for higher education should be made by the proposed National Institute of Education.

11. Colleges and universities should provide incentives to faculty members who contribute to the advancement of instructional technology. Released time for the development of instructional materials and promotions and salary improvement for successful achievement in such endeavors should be part of that encouragement.

12. Colleges and universities that are responsible for the training of prospective university, college,

and high school teachers should begin now to incorporate in their curricula instruction on the development of teaching-learning segments that appropriately utilize the expanding technologies of instruction.

13. Colleges and universities should supplement their instructional staffs with qualified technologists and specialists to assist instructors in the design, planning, and expanding instructional technologies. Institutions of higher education at all levels should develop their potentials for training specialists and professionals needed to perform the new functions that are associated with the increasing utilization of instructional technology on the nation's college and university campuses.

14. High schools that do not already do so should offer instruction in basic concepts and uses of computers and should encourage their students to obtain, as early as possible, other skills that will be helpful in the use of new media for learning.

15. An independent commission, supported whether by an appropriate agency of the United States Department of Health, Education and Welfare or by one or more private foundations should be created to make assessments of the instructional effectiveness and cost benefits of currently available instructional technology. Findings of the commission should be published and appropriately disseminated for the advice of institutions of higher education, such cooperative learning-technology centers as may be established, and governments and foundations supporting the advancement of instructional technology."¹

Two studies exist that attempt to study the use of Media in a University setting in order to make recommendations for the establishment of Media Programs.

The first is a UCLA report of the Learning Resources Committee. This committee was appointed by the Chancellor to study the use of media at UCLA and to make recommendations concerning its role in the university. Section 1 of the

¹Carnegie Commission, The Fourth Revolution: Instructional Technology in Higher Education (New Jersey: McGraw-Hill, June, 1972).

committee report presents the conclusions derived from the policy, program recommendations and operational suggestions of section 2. These are supported by background information in section 3. There the present status, reasons for change, and a conceptual basis for planning are presented. The UCLA report did not base its recommendation on an analysis of the status of Media resources or usage. Below are the general objectives:

- "1. A comprehensive program of selective development and use of media learning resources together with attention to careful planning, evaluation and modification of the program of development and use as it proceeds.
2. Facilitating and motivating the use by faculty and students of the means already at hand.
3. Institutionalizing faculty and student participation in the decision process leading to the development of policies, programs, and arrangements pertaining to media matters.
4. Seeking joint arrangements with other UC campuses and other institutions to originate and exchange mutually useful programs on a cost-effective basis.
5. Integrating the use of media in learning by students on campus with extensive involvement of media in the lifelong learning experience both on and off campus.¹"

These are the specific recommendations:

- "1. Active Support. As part of a comprehensive strategy for reducing costs, improving instructional quality, maintaining leadership, increasing accessibility of UCLA's educational endeavors and broadening the base of the university's support, the Chancellor's Office institute at once an active program of planning, funding, and administrative facilitation for substantially increased development and use of media learning resources.

¹Report of the Media Learning Resources Committee, UCLA, "Learning to Use the Tools", ERIC ED 093 284 (June, 1974), p.3.

2. Director of Media Services and Development. The Chancellor act as promptly as possible to select and appoint a Director of Media Services and Development.

3. Policy Advisory Board. The Chancellor promptly establish a policy Advisory Board to: recommend policy, develop criteria for selection of a Director of Media Services and Development and any other top level media-related personnel, and provide guidance on such matters as planning, setting of priorities, determining directions and rates of development, services to be offered, relations with faculty, students and community, judgment of performance, and other matters. It should be broadly representative of the faculty. In addition, it should include student representatives, a librarian, and others as appropriate. It should make recommendations and provide guidance to the Chancellor's office and to any other office in the reporting chain between media units and the Chancellor's office, on media-related matters such as provision of incentives for faculty to develop and use media effectively, evaluation of Media Center plans and performance including cost-effectiveness, needs for support of media activities, and relations regarding media with other campuses, and the community.

4. Support of Studies. The Policy Advisory Board have an adequate budget to be used for conducting and/or commissioning studies and research related to its functions.

a. Actual and Prospective Benefits. A continuing study of cost-effectivenesses and of actual and prospective benefits of media use under various development strategies and arrangements be developed to help support future decision-making with respect to media use and organization.

b. Economies of Scale. A planned approach be developed for achieving the economies available through media use at proper scale.

c. University-wide System. The feasibility and desirability of cooperation throughout the University of California system for the creation and distribution of media materials be explored. UCLA should take the initiative in a joint study with other campuses.

d. Relation to Outside Events and Organizations. Continuing research and program development be undertaken to relate UCLA's media activities to events, organizations and the community beyond the campus. This program could be jointly undertaken by the Media Center, University Extension, the Communications Studies Program, the School of Law, the Graduate

School of Education and other appropriate units.
 e. Survey of Use. An annual campus-wide survey of use of media for educational purposes be conducted and published by the Survey Research Center in cooperation with the Media Center. The survey should include the ways media are being used, ideas for their use, and judgments on their value by those who have used them or seen them used. A sample survey or selected other institutions should also be included.

5. Instructional Improvement. An Instructional Resources Laboratory or similar instrumentality be developed whose purpose would be to assist those with instructional responsibilities, who wish to do so, to improve their instructional planning, instructional design, and other learning-related activities. A part of the Laboratory's functions would focus on media-based approaches.

6. Planning. A continuing planning process be instituted by the Media Center immediately, covering a five-year period, leading to an annually-revised five-year plan. An integral part of the process must be an evaluation plan covering results of previous activities.

7. Setting of Priorities. In developing policies for selecting among potential projects, the management of the Media Center or of any activity involving the use of media consider criteria such as the following:

Other things being equal,

- a. Prefer items that will tend to generate and guide subsequent improvement, that are generalizable, that can act as models.
- b. Select activities that have programmatic consequences; e.g., pilot films for prospective series, beginning a new, needed service to an important constituency.
- c. Invest in activities that relate to each other in mutually reinforcing ways, and in which economics are possible through combining; e.g., use of film in a course, the product of which can become part of the oral history archive.
- d. Invest in projects which will help attract outside support; i.e., where a multiplier effect is available.
- e. Select applications which promise exposure to large numbers of students (and others) so that unit cost is kept low and efficiency high.
- f. Choose items whose results are demonstrable, and

can be properly evaluated.

8. Funds. While every effort should be made to develop policies which will allow the recovery of media costs from users outside the University, and the generation of funds for further development of educationally relevant media materials, the Chancellor should seek increased funds to support the development of Recommendation 1. In addition there should be a subsidy for capital, building, and equipment development.

9. Incentives. Formal recognition be given by the Chancellor (and by the Academic Senate) to creation of deserving media materials as a contribution to the domain of knowledge comparable to research activity or the writing of a scholarly article or book. In addition arrangements are needed to provide faculty members who develop media materials for educational purposes a share in the proceeds generated by the use and marketing of those materials, in a fashion analogous to textbook royalties but possibly based on a different model. The sponsoring department or school also should receive a fair share of the proceeds, usable to further its educational objectives either through development of additional media materials or in other ways at its option. Naturally, any return beyond that which goes to the faculty members and the department or school should be used by the University to sponsor research, improve education, or in other ways to be appropriate to its mission.

10. Faculty Responsibility. Faculty members throughout the University might well reassess more actively the extent to which they ought to focus on instructional planning and design, and on selecting the best ways available to assist students in attaining desired competencies, possibly through the use of somewhat different instructional approaches. Department Chairmen and Deans should encourage their members to do so individually and jointly. The Office of Academic Change should solicit ideas and proposals for new approaches on a regular basis (not only when funds are available, but as a basis for soliciting funds and other support), and should work with faculty members to develop their proposals. Faculty members should feel encouraged to make appropriate suggestions and proposals for action to the Media Advisory Board, when it is formed, and to the Instructional Resources Laboratory, when it is formed.

11. TV Colorization. Immediate plans be devised by the Media Center for colorization of the television facilities of the campus. Funds to support such equipment and facilities improvement should be actively sought by the Chancellor's Office.

12. Grant Proposals. The Office of the Chancellor issue a policy statement to the effect that, whenever possible and appropriate, proposals for extramural funds to be used for purchase or use of media equipment should also request support for equipment maintenance. The Media Center should participate by supplying estimates for this purpose. The Office of Extramural Support should remind proposers of this policy.

13. Media Materials Rating Exchange. The Media Center ask users of media materials to provide ratings, on a specified set of scales, of each item used or reviewed for use, so that this information can be passed on to others for their guidance.

14. Efficient Use of Equipment. An analysis be made of the potential of a "market system" on campus for the acquisition, use, and exchange of media equipment.

15. Equipment Index. The Media Center organize and maintain a comprehensive index of equipment available, classified in user-oriented terms.

16. Lease Arrangements for Films, etc. The Media Center attempt to arrange with suppliers of "media packages" to UCLA users, for rental or lease charges to be applied against purchase by the University after repeated use."¹

The other report is a report of the University Ad Hoc Committee on Instructional Media at North Carolina University, Greensboro. This committee was charged with studying the needs of the university for special instructional media, surveying its existing resources in this area, and recommending a plan for coordination of use of instructional media. By and large,

¹Report of the Media Learning Resources Committee, UCLA, "Learning to Use the Tools", ERIC ED 093 284 (June, 1974), pp.3-14.

departments agreed that maintenance of existing equipment was an immediate problem. Also, faculty and students basically believed in the need for a campus film library, readily-available audiovisual equipment, and training in the use of media. Although a central facility was thought desirable by many, others feared that it would reduce accessibility and promote bureaucracy. The committee recommended that a coordinating agency for media services be established. Its functions would include: coordination of media services, equipment maintenance services, provision of hardware/software collections, consultant services and instructional development, production services, and telecommunication services. These programs would be implemented in three phases. This study just describes the usage as being "from very light to heavy". There was no study on the pattern of usage or the analysis of usage.¹

Concerning evaluation of media as stated before there is little on evaluation of media programs in higher education that exist. The ones that do, assume a well defined program or a centralized situation.

W. R. Fulton has developed an evaluative instrument for higher education called: Evaluative Check List: An Instrument for Self-Evaluating an Educational Media Program in Colleges and Universities. It is based on these assumptions:

1. That there are fundamental elements of an educational media program which will facilitate the improvement of instruction.

¹The Report of the University Ad Hoc Committee on Instructional Media, ERIC ED 055 443 (July, 1971), p. 67.

2. Administrators and teachers are committed to the proper use of educational media for instructional purposes.
3. Educational media are an integral part of curriculum and instruction.
4. An educational media center is accessible to the faculty.
5. The physical facilities are conducive to proper use of educational media.
6. The media program is adequately financed.
7. The staff is adequate and qualified to provide for the educational needs of all faculty members.¹

As can be seen from these assumptions it would not be appropriate to use this instrument in situations where media programs are not in existence or where media is highly decentralized. It also contains no provision for evaluating the quantitative level of usage which should be a pivotal fact in evaluating a media program.

There have been a number of Masters Theses and Doctoral Dissertations that used the Fulton instrument. Most are irrelevant to this study except perhaps the Kansas Study by Petty. He indicated:

"Instructional media programs are more advanced in two year colleges and universities and in private institutions." Also "a high percentage (75.5) of all institutions responding judged their instructional media programs to be below the criteria relating to proper instructional media commitment (weak--35.5 percent, neither weak nor strong--40.0 percent)." He recommends: "That further studies be conducted at the college and university level to assess utilization of educational media." He felt: "A utilization

¹W. R. Fulton, Evaluative Checklist: An Instrument for Self-Evaluating an Educational Media Program in Colleges and Universities, (Washington D.C.: AECT, September, 1970).

survey would add greatly in providing a wider basis of research upon which Kansas colleges and universities may build stronger instructional media programs."¹

It should be noted that the Fulton instrument used in this study is mainly an administrative evaluation and does not necessarily reflect faculty commitment to a media program.

Richard Sanner did an evaluation of Educational Media Programs from the faculty viewpoint using a form which he developed. Again, however it was written for a centralized situation and did not contain any determination of the level of usage, potential and actual.²

Spencer Rorhlick did a study that analyzed attitudes toward media, the perceived deterrents to media usage, and related this to actual media usage. He determined actual media usage by using data obtained by the instructional media center. The data obtained was interesting because of some of its general findings, however the information obtained on usage was obtained according to the faculty member. No distinction was made between usage according to class rather than faculty member. It should be pointed out that the audiovisual usage in classes taught by a single faculty member can vary considerably from one class to another. The findings of this study are summarized below:

"1. A significant relationship exists between faculty members' attitudes toward media and use of media. The more favorable the attitude toward media, the greater the use of media.

¹Bruce Petty, An Evaluation of Selected Instructional Media Programs in Kansas Colleges and Universities, Unpublished Masters Report, Kansas State University, 1972.

²Richard Sanner, "Evaluation of Educational Media Programs", Audio-Visual Instruction (September, 1974), pp. 7-9.

2. The relationship between faculty attitudes toward media and perceived deterrents to media use is significant. The more negative the attitude, the greater the perception of deterrents.
3. The relationship between faculty members' attitudes toward media and media use are not significantly affected by deterrents to media use perceived by the faculty.
4. There is no significant relationship between sex of faculty members and their (1) attitudes toward media, (2) perceived deterrents, and (3) use of media.
5. No significant association exists between faculty members' total teaching experience (1) attitudes toward media, (2) perceived deterrents, and (3) media use.
6. No significant relationship exists between the New Paltz College teaching experience of faculty members and their (1) attitudes toward media, (2) perceived deterrents, and (3) use of media.
7. There is a significant relationship between faculty members' academic rank and use of instructional media. Professors and associate professors make greater use of media than do assistant professors and instructors.
8. A significant association exists between faculty members' academic department and (1) attitudes toward media and (2) use of media.
9. The greatest perceived deterrents to media use are: (1) lack of training in media use, (2) inadequate media budgets, (3) inadequate media facilities, (4) inappropriate materials, (5) insufficient time for media planning, and (6) teaching loads too great.¹

While this seems to point to a pattern of usage among individual faculty members it does not attempt to determine the effects of variables such as class size, type of class, or level of instruction on the usage of audiovisual media.

¹Spenser Rohrlick, Relationships Among College Faculty Members' Attitudes Toward Media, Perceived Deterrents, and Use of Media, Unpublished Doctoral Dissertation, Syracuse University, 1972.

Chapter 3

METHODS

Method of Sampling

A stratified random sample of courses was used. The sample was taken from the Fall 1975 line schedule using all courses except classes meeting by appointment and special classes with no set meeting times.

Veterinary Medicine was excluded because it operated as a self-contained unit excluded from most university allocations studies.

The following conditions were reflected in the sample to determine the pattern of usage: (1) the size of class; Small (1-19), Medium (20-99), or Large (100+); (2) the level of class instruction; Lower division (Freshman-Sophomore), Upper division (Junior-Senior), or Graduate division; and (3) type of class; Lecture, Recitation, or Laboratory. The line schedule classification was used for level of instruction determination and type of class. Enrollment figures were used for the size of class.

The line schedule was then divided into three, three-by-three matrices, see Table 1.

From these stratified matrices a 20% random sample of the classes was selected for small and medium sized classes. A 50% sample of all large classes was used. This was done because of the relative number of large classes which represent a greater proportion of the student population.

Table 1

Matrices Showing the Population of Courses from the Fall
1975 Course Schedule Classified into Class Type,
Class Size and Levels of Instruction
from which the Sample was Drawn

	Laboratory	Lecture	Recitation
Small	195	3	212
Medium	365	85	538
Large	0	58	46
LOWER DIVISION			
	Laboratory	Lecture	Recitation
Small	172	80	160
Medium	123	115	339
Large	0	11	14
UPPER DIVISION			
	Laboratory	Lecture	Recitation
Small	27	44	179
Medium	14	42	79
Large	0	0	0
GRADUATE DIVISION			

A regular mathematical interval was employed to select the sample. Using a random table to find the starting point in the line schedule every fifth one was selected in the 20% sample and every other one in the 50% sample. The reason an interval was used was to enable departments and colleges equal representation for a further breakdown of data.

Materials and Instruments Used

Two instruments were designed for this study; 1) the interview form and 2) the faculty-course survey form. The interview form (Appendix A) was used to interview departmental heads to obtain a departmental view of the need for involvement in audiovisual usage and a picture of the current usage. The form attempted to identify the usage of equipment, the personnel involved, future needs, materials and services accessibility, repair problems, the extent of sharing or borrowing, and the departmental philosophy of how the University involvement in an audiovisual program should be maintained.

The faculty-course survey form (Appendix B) was the focus of this study, especially the questions dealing with the frequency of usage of audiovisual equipment, materials, and services both actual and potential. This form was intended to sample faculty feeling about accessibility and philosophy of university involvement in an audiovisual program. It also attempted to determine the frequency, quality, and availability of individual items and services.

An IBM 370 computer was used for computation of results.

Research Design Used

Using the two scales on the Fall '75-'76 Course Audiovisual Usage form, the Actual Usage reflects the present frequency of Audiovisual equipment and materials usage and the Potential Usage determines the respondents assessment of their potential frequency of usage of Audiovisual equipment and materials if all equipment and material accessibility, classroom condition, technical assessment, etc. were optimum. Assigning a numerical value to the six frequency levels, a factorial design was used. Analysis of variance was used to analyze the data for significance. This was done to determine if there was a significant difference in potential usage of audiovisual equipment and materials between class size (Small, Medium, Large), class type (Lecture, Laboratory, Recitation), and class level (Lower division, Upper division, Graduate division). The .05 level of significance was used in testing the hypotheses.

Data Collection Methods

The departmental interview form was completed by this investigator in a personal interview situation. Ninety-five percent of the department heads or their designates were interviewed.

The faculty-course survey was distributed to the department heads who in turn distributed them to the instructors who taught

the sampled courses. The respondents were requested to return the completed questionnaire to the department heads who in turn returned them to this investigator. This method was used in hopes of increasing the return rate.

Follow up was done through the department heads. Each was requested to secure the return of those forms which this investigator had not yet received.

Of the 606 questionnaires sent to the department head, 379 were returned. Thirty-six of these were ruled invalid because of course cancellation, off campus courses, instructors who were no longer available, etc. Thus 324 questionnaires were processed for evaluation. This represented 53.4% of those sampled. While this return rate seems rather low it was felt that because it was a large sample (50% of the large classes and 20% of the small and medium) it would reflect the major characteristics of the population.

Analyzing Data

The IBM 370 computer was used to make a frequency count of all responses on the faculty form and to compute analysis of variance on the level of frequency of potential usage of audio-visual equipment and material by class size, class type, and level of instruction. From this the hypotheses were either rejected or accepted and a pattern of the level of frequency of usage both potential and actual was constructed. Other data obtained from the interview form and other items on the faculty

form were reported. Although an in depth analysis was not made, these data can provide the basis for further work.

Limitations

In responding to the potential usage, the level of projection or imagination, could be either exaggerated or underestimated when compared to real usage. Although this can not be controlled it was felt that the relationship to the real situation could be increased by a corresponding rating of the actual usage. By first asking the actual usage then the potential, it was hoped that the respondent would give a more accurate account in assessing the potential usage.

Some difficulty was expected in return because of course cancellations, off campus courses or instructors that had left the campus. This method, however, was chosen because a straight random sample would have included faculty who were involved very little in instruction. Another consideration was that faculty members' usage might vary considerably from one class to another.

The return rate was also lower than expected because the survey was done at the end of the academic year and many faculty members did not return their surveys because of the evaluation of students and last minute preparations for the end of their courses.

Chapter 4

RESULTS

Departmental Interview

Using the form in Appendix A this investigator interviewed 95% of the department heads or their designates at Kansas State University. This process involved a thirty minute oral interview with the interviewer recording the responses on the pre-designed interview form. The results of this process not only yielded objective response to the questions but also impressions as to the general status of audiovisual usage and level of support from the college or department.

The objective information yielded the following results:

1. In rating the services most desired by departments the following is a University average ranked in descending order of priority (Appendix A, question 6).
 - (1) Slide Production
 - (2) Video Taping
 - (3) Overhead Transparency Production
 - (4) Programmed Instruction Production
 - (5) Slide Duplication
 - (6) Sign, Chart, Picture Preparation
 - (7) Color Film Processing
 - (8) Media Program Preparation
 - (9) Film Production
 - (10) Cable Television

(11) Filmstrip Preparation

(12) Audio Recording

2. When asked if there was a departmental facility for storage of films (Appendix A, question 7) 51.7% replied that there was not. 28.5% stated that there was and 19.8% gave no response. See Table 2.
3. When asked if there was adequate accessibility to audiovisual equipment (Appendix A, question 8) 64.2% felt that there was adequate accessibility, 26.7% felt that there was not, and 9.1% gave no response. See Table 2.
4. When questioned about adequate accessibility to audiovisual materials and services (Appendix A, question 9) 53.5% replied that there was adequate accessibility, 37.5% felt that there was not, and 9% gave no response. See Table 2.
5. When asked if the department shared their equipment with other departments (Appendix A, question 10) 60.7% stated that they did while 23.3% did not. 16% did not respond. See Table 2.
6. When asked if the department borrowed equipment (Appendix A, question 11) 64.2% replied that they did borrow and 30.3% replied that they did not borrow. 5.5% did not respond. See Table 2.
7. When asked if the department would have any equipment they would be willing to loan or work out an exchange agreement with other departments (Appendix

Table 2

Adequacy of Audiovisual Equipment, Materials and Sources
as Indicated by Department Heads
(Interview Form, Questions 8-13 and 15, Appendix A)

	Yes	No	Blank-No Response
Storage for Films	28.5%	51.7%	19.8%
Adequate Accessibility to Audiovisual Equipment	64.2%	26.7%	9.1%
Adequate Accessibility to Materials and Services	53.5%	37.5%	9.0%
Share with other Departments	60.7%	23.3%	16.0%
Borrow from other Departments	64.2%	30.3%	5.5%
Loan or Exchange Agreement for Equipment	48.2%	37.3%	14.5%
Preventative Maintenance Program for Equipment	39.2%	42.8%	18.0%
Adequacy of Repair	55.3%	30.3%	14.4%

A, question 12) 48.2% stated yes while 37.3% did not. 14.5% did not respond. See Table 2.

8. In response to the question of whether the department had a preventative maintenance program of audiovisual equipment (Appendix A, question 13) 39.2% indicated they did, 42.8% indicated they did not and 18% did not respond. See Table 2.
9. The response to the question on the adequacy of the repair services on equipment was 55.3% adequate, 30.3% inadequate, and 14.4% no response. See Table 2.

These findings were not the complete findings of the interview phase but they were the responses that had relevance to this study.

The usage patterns and support varies from one college to another and sometimes from one department to another at Kansas State University. Some colleges are quite well equipped and have a media center staffed with professionals, these are: Veterinary Medicine, Education and Home Economics. Some colleges have no media center or support service but operate informally, these are: Engineering, Architecture and Design and Business Administration. Agriculture and Arts and Sciences share support services. One professional works half-time for Agriculture and half-time for Arts and Sciences.

Faculty-Course Survey

The response to the faculty-course survey forms was broken

down into the various categories as outlined in Table 3.

The results of the questionnaire (Appendix B) can be summarized as follows:

1. In determining the level of actual usage (Appendix B, question 1) 14.2% responded that they used audiovisual equipment and materials for most class sessions, 3.4% - 3/4 class sessions, 9% - 1/2 class sessions, 9.9% - 1/4 class sessions, 24.7% - occasionally, and 28.4% never used audiovisual materials. 10.5% did not respond. See Table 4.
2. The response on the potential usage scale (Appendix B, question 2) was an attempt to determine the level of potential usage of audiovisual equipment and material if all conditions were optimum. The results were as follows: 19.8% - most class sessions, 7.4% - 3/4 class sessions, 11.4% - 1/2 class sessions, 12% - 1/4 class sessions, 22.5% - occasionally, and 14.5% - never. 12.3% did not respond. See Table 5.
3. In response to the question of borrowing equipment from other departments (Appendix B, question 4) 13.6% responded that they did borrow, 62.7% did not borrow, and 23.8% did not respond. See Table 6.
4. On the question of accessibility to equipment (Appendix B, question 5) 59.9% felt that they had adequate accessibility while 17% felt they did not. 23.1% did not respond. See Table 6.

Table 3

Numbers and Percentages of Courses by
Class Type, Level, Size and College

<u>Type of Class</u>	<u>Number</u>	<u>Percentage of Total Response</u>
Laboratory	82	25.3
Lecture	69	21.3
Recitation	169	52.2
Other	<u>4</u>	<u>1.2</u>
Total	324	100.0
<u>Level of Class</u>		
Lower Division	162	50.0
Upper Division	119	36.7
Graduate Division	<u>43</u>	<u>13.3</u>
Total	324	100.0
<u>Size of Class</u>		
Small	108	33.3
Medium	171	52.8
Large	<u>45</u>	<u>13.9</u>
Total	324	100.0
<u>College</u>		
Agriculture	46	14.2
Architecture and Design	7	2.2
Arts and Sciences	164	50.6
Business Administration	15	4.6
Education	22	6.8
Engineering	37	11.4
Home Economics	<u>33</u>	<u>10.2</u>
Total	324	100.0

Table 4

Level of Actual Usage of Audiovisual Equipment and Materials
(Question 1, Appendix B)

	<u>Number</u>	<u>Percentage of Total Response</u>
Blank-No Response	34	10.5
Most Class Sessions	46	14.2
3/4 Class Sessions	11	3.4
1/2 Class Sessions	29	9.0
1/4 Class Sessions	32	9.9
Occasionally	80	24.7
Never	<u>92</u>	<u>28.4</u>
Total	324	100.0

Table 5

Level of Potential Usage of Audiovisual Equipment and
Materials
(Question 2, Appendix B)

	<u>Number</u>	<u>Percentage of Total Response</u>
Blank-No Response	40	12.3
Most Class Sessions	64	19.8
3/4 Class Sessions	24	7.5
1/2 Class Sessions	37	11.4
1/4 Class Sessions	39	12.0
Occasionally	73	22.5
Never	<u>47</u>	<u>14.5</u>
Total	324	100.0

Table 6

Accessibility of Audiovisual Equipment, Materials
and Services as Reported by Faculty
(Questions 4, 5 and 6, Appendix B)

	<u>Yes</u>	<u>No</u>	<u>Blank-No Response</u>
Borrowing Equipment	13.6%	62.7%	23.8%
Adequate Accessibility to Equipment	59.9%	17.0%	23.1%
Adequate Accessibility to Materials and Services	51.9%	21.6%	26.5%

5. The accessibility to materials and services (Appendix B, question 6) was responded to accordingly: 51.9% felt that they had adequate accessibility while 21.6% felt they did not have adequate accessibility. 26.5% did not respond. See Table 6.

Actual and Potential Usage Comparison

In attempting to determine areas of potential growth in increased usage of audiovisual equipment and materials it is helpful to look at the results of the Actual usage question (Appendix B, question 1) in relation to the Potential usage (Appendix B, question 2).

Of the 324 responses, 40 did not respond to both items and there were 3 invalid responses. Thus 281 responses produced the following results:

- (1) 56% saw no conditions that would increase their usage
- (2) 44% indicated that they would increase usage if conditions were optimum.

See Table 7 for a comparison of Actual and Potential Usage.

Testing of the Hypotheses

The previously stated null hypotheses were:

- I. The level of frequency of potential usage of audiovisual equipment and materials will not differ significantly between size of class (small, medium, or large).
- II. The level of frequency of potential usage of audiovisual

Table 7

Extent of Change Estimated by Faculty if Existing
Conditions were Replaced by Optimum Conditions
(Items 1 and 2, Appendix B)

	<u>Actual</u>	<u>Potential</u>	<u>Number</u>	<u>Percentage of Response</u>
5 degree	Never	to Most	3	1.1
4 degree	Never	to 3/4	0	0.0
	Occasionally	to Most	4	1.4
3 degree	Never	to 1/2	2	0.7
	Occasionally	to 3/4	5	1.8
	1/4	to Most	2	0.7
2 degree	Never	to 1/4	7	2.5
	Occasionally	to 1/2	8	2.8
	1/4	to 3/4	1	0.5
	1/2	to Most	6	2.1
1 degree	Never	to Occasional- ly	30	10.7
	Occasionally	to 1/4	20	7.1
	1/4	to 1/2	17	6.0
	1/2	to 3/4	12	4.3
	3/4	to Most	6	2.1
Total Change			123	43.8
No Change			<u>158</u>	<u>56.2</u>
Total			281	100.0

equipment and materials will not differ significantly between types of class (laboratory, lecture, recitation).

- III. The level of frequency of potential usage of audiovisual equipment and materials will not differ significantly between levels of instruction (lower, upper and graduate division).

These hypotheses, subjected to an analysis of variance test at the .05 level, provided the following results:

- (1) Hypothesis I is rejected. The level of frequency of potential usage of audiovisual equipment and materials due to size of class is significantly different at the .05 level. It is also significant at the .01 level. See Table 8 for the computations.
- (2) Hypothesis II is retained. The level of frequency of potential usage of audiovisual equipment and materials due to class type does not differ significantly at the .05 level. See Table 9 for the computations.
- (3) Hypothesis III is retained. The level of frequency of potential usage of audiovisual equipment and materials due to level of instruction does not differ significantly at the .05 level. See Table 10 for the computations.

Analysis of Results

1. Department and Faculty Assessment of Accessibility - the majority of faculty and departments rate the accessibility of equipment as adequate (59.9% individual faculty members -

Table 8
Analysis of Variance of Potential Usage
and Size of Class

Source	Sum of Squares	df	Mean Square	F	Level of Significance
Main Effects- Size of Class	86.756	2	43.378	10.726	0.001
Explained	86.756	2	43.378	10.726	0.001
Residual	1298.213	321	4.044		
Total	1384.969	323	4.288		

Table 9
Analysis of Variance of Potential Usage
and Type of Class

Source	Sum of Squares	df	Mean Square	F	Level of Significance
Main Effects- Type of Class	17.413	2	8.706	2.073	0.125
Explained	17.413	2	8.706	2.073	0.125
Residual	1331.441	317	4.200		
Total	1348.854	319	4.228		

Table 10

Analysis of Variance of Potential Usage
and Level of Instruction

Source	Sum of Squares	df	Mean Square	F	Level of Significance
Main Effects- Level of Instruction	4.082	2	2.041	0.474	0.999
Explained	4.082	2	2.041	0.474	0.999
Residual	1380.887	321	4.302		
Total	1384.969	323	4.288		

64.2% departments' heads). Materials and services are also rated as adequate (51.9% individual faculty members - 53.5% departments' heads). See Tables 2 and 6.

2. Faculty Level of Actual and Potential Usage - of the 284 responding 32% never use audiovisual equipment and materials and 68% use audiovisual equipment and materials from occasionally to most of the time. See Tables 4 and 5. If conditions were optimum 44% would increase usage while 56% would maintain their present level of usage. See Table 7.

3. Departmental Assessment of Services Most Needed - Ranked in order of priority, these are: slide production; video taping; overhead transparency production; programmed instruction production; slide duplication; sign, chart, picture preparation; color film processing; media program preparation; film production; cable television; filmstrip preparation; and audio recording.

4. The Effect of Class Size, Type and Level of Instruction on Potential Usage of Audiovisual Equipment and Materials - Class type or level of instruction showed no significant effect on the potential level of usage of audiovisual equipment and materials. Class size does show an effect on the potential usage of audiovisual equipment and materials with a significant difference occurring at the .001 level. Further breakdown reveals that there is a significant difference at the .05 level between small and medium and large, and small and large. This difference was determined by use of a t-test. Refer to Tables 11, 12, and 13.

This difference can be examined more closely by referring to

Table 11
t-test of Potential Usage and Small-Medium Classes

Class Size	Number of Cases	Mean	SD	Standard Error	F	2-Tail Probability	T Value	df	2-Tail Probability
Medium	171	3.0175	2.076	0.159					
					1.09	0.752	2.31	214	0.022
Small	45	2.2222	1.987	0.296					

Table 12
t-test of Potential Usage and Medium-Large Classes

Class Size	Number of Cases	Mean	SD	Standard Error	F	2-Tail Probability	T Value	df	2-Tail Probability
Large	108	3.7963	1.913	0.184					
Medium	171	3.0175	2.076	0.159	1.18	0.358	3.14	277	0.002

Table 13
t-test of Potential Usage and Small-Large Classes

Class Size	Number of Cases	Mean	SD	Standard Error	F	2-Tail Probability	Value	df	2-Tail Probability
Large	108	3.7963	1.913	0.184					
					1.08	0.736	4.59	151	0.000
Small	45	2.2222	1.987	0.296					

Table 14. It can be seen that in general the larger the class size the greater the level of potential usage.

Table 14

Relationships of Potential Usage of Audiovisual
Equipment, Materials and Services to Class Size
(Item 2, Appendix B)

Potential Usage	Small	Medium	Large
Blank-No Response	6.5%	15.2%	15.6%
Most Classes	13.0%	18.1%	42.2%
3/4 of Classes	6.5%	8.2%	6.7%
1/2 of Classes	12.0%	12.9%	4.4%
1/4 of Classes	12.0%	12.8%	8.8%
Occasionally	30.6%	19.3%	15.6%
Never	19.4%	13.5%	6.7%
Total	100.0%	100.0%	100.0%

Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The main purpose of this study was to determine the relationships of class size, type, and level of instruction on the level of potential usage of audiovisual equipment and materials. Three hypotheses were postulated:

- I. The level of frequency of potential usage of audiovisual equipment and materials will not differ significantly between size of class (small, medium or large).
- II. The level of frequency of potential usage of audiovisual equipment and materials will not differ significantly between types of class (laboratory, lecture, recitation).
- III. The level of frequency of potential usage of audiovisual equipment and materials will not differ significantly between levels of instruction (lower, upper, and graduate division).

This study also included an analysis of the adequacy of audiovisual equipment, materials and services based on a survey of the faculty and department heads. The level of actual usage and potential usage of audiovisual equipment and materials was determined by assessing the results of a random survey of courses. The responses were made by faculty members who taught the courses surveyed. Department heads were asked to rank the audiovisual services as they pertained to their needs.

Of the three hypotheses postulated, Hypothesis I was rejected. Hypotheses II and III were retained. There appeared to be no significant difference in the level of potential usage of audiovisual equipment and materials in relation to class type (laboratory, lecture, recitation) or level of instruction (lower, Freshman-Sophomore; upper, Junior-Senior; or Graduate division). There was a significant difference with regard to class size (small, 1-19; medium, 20-99; large, 100+). Each change in class size showed a significant difference: small to large, small to medium, and medium to large.

Conclusions

Most of the faculty and departmental heads seem to feel that audiovisual equipment, materials and services are adequate. However, the dissatisfactions seems rather high. In the results of the rating of actual and potential usage a large percentage of the respondents (44%) indicated that they would increase usage if conditions were better.

The rating of audiovisual services by departmental heads seems a clear indication of the direction in which usage is probably increasing, namely slide projection, video-taping, overhead projection. See page 26 for a full list of the ranking services.

The explanation for increased potential usage of audiovisual equipment and materials in larger classes could possibly be due to one or more of these factors: (1) instructors may

prepare better for larger classes thus involving more audio-visual preparation as well; (2) the very nature of audiovisual instruction may lend itself better to large class situations; (3) larger classrooms may be better equipped for audiovisual instruction. It could also be a factor that is just present on the Kansas State University campus.

The apparent contradiction between "adequacy" and "potential usage" may be explained by the respondents definition of adequate. It appears that adequate is just meeting present needs and if conditions were better usage would increase.

There are extremes in the level of support of audiovisual instruction among colleges and departments at Kansas State University. There are some very satisfied colleges and departments, some expressing great needs, and some departments that have made very little use of audiovisual materials and equipment. Various departmental heads expressed great interest in audiovisual usage. They confessed little knowledge in the area but felt they would like to know more.

Clearly the audiovisual status is a situation that is changing rapidly at Kansas State University. It is developing rapidly in some areas, while other areas are just beginning to realize the potential of using audiovisual materials. Others have shown no interest in the area.

Recommendations

Kansas State University should further investigate the

specific areas of dissatisfaction regarding adequacy of audio-visual materials, equipment and services. Deterrants to effective usage should be identified. A comprehensive program designed to provide the audiovisual materials, equipment and services needed by the faculty should be developed.

The Carnegie Commission recommendations cited in Chapter 2 show a clear direction for audiovisual growth in higher education. The case studies done by UCLA and North Carolina University, cited in Chapter 2, can also serve as guides for developing a program of support.

The comments on the faculty and departmental forms create a general impression that help is needed. Most comments were generally in favor of a university center that could provide support in materials and services that is staffed by professionals who would provide technical assistance, repair help and instructional design. There seems to be a fear of a pool of equipment. Most faculty and departmental comments seemed to prefer to keep the equipment used frequently close at hand. They did not favor giving it up to a center where they would have to schedule usage. There was, however, sentiment supporting a coordinated resources information center which could provide guidance in locating equipment and resources periodically desired. One of the most frequent comments was that having to carry equipment across campus limits the usage.

To help alleviate the most pressing needs and establish direction towards a coordinated university program a university

center should be established that (1) maintains an accurate file of equipment and its location, (2) provides photography and graphic services, (3) provides repair assistance, (4) provides professional help in instructional design, (5) provides student help in set up, delivery, and operational assistance, (this would not necessarily involve pooling of equipment - equipment could be delivered and brought back to origin locations), (6) an exchange of information between those involved in audiovisual instruction either in workshop or seminar form and/or newsletters.

In evaluating audiovisual or media instruction, as a regular procedure in a well established program or in the beginning stages of implementation of a program, it would be important to determine the level of actual usage and the potential for growth. The process of assessing actual usage should be as objective as possible, such as records from the media center. In the absence of such objective data, subjective assessment by instructors is necessary. Most evaluative procedures that attempt to evaluate usage rely on the instructors total usage in all classes. The method used in this study evaluated on the basis of course usage rather than faculty usage. This was done because it was felt that an instructors usage would vary considerably from one course to another. In assessing usage on the course level variables such as class size, type, level of instruction and physical facilities could be investigated.

Combining an assessment of actual usage with potential usage provided data that indicated areas of growth and/or the

presence of deterrents to audiovisual usage. This combination could provide the basis of an ongoing assessment of the effectiveness of an audiovisual program. Perhaps a validated and reliable scale could be developed for programs of all sizes that would indicate the effectiveness of a program by comparing actual and potential audiovisual usage.

The significant difference in class size and potential usages should be further investigated to find out the reason for its existence and to decide if it is present in other institutions of higher education.

Because of the large investments educational institutions have in audiovisual instruction in both time and money, there should be an extensive effort made to develop a standardized evaluation instrument for audiovisual programs. This instrument should be as objective as possible and contain all the necessary elements of an effective program. These elements are: (1) administrative commitment; (2) usage evaluation by faculty; (3) faculty qualitative evaluation; (4) student evaluation.

The students evaluation should contain an assessment of the usage of the class surveyed both quantitative and qualitative and of the perceived administrative commitment to audiovisual instruction. Elements 2, 3, and 4 should be surveyed by class rather than faculty or student groups because of the wide variance in media usage between classes. The evaluation form should be applicable in all situations, from a well-organized, centralized program to an informal, decentralized situation.

Tomorrow's students will be sophisticated users of audio-visual equipment, materials and services. Students are now producing films and media programs in some elementary classrooms. As these students enter higher education they will be able to express their ideas in newer media formats as well as in the older traditional ones. They will demand the same of their instructors. Institutions of higher education must develop programs consistent with current and future generations of learners whom they are responsible for serving.

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A P P E N D I C E S

APPENDIX A

SURVEY OF AUDIO-VISUAL EQUIPMENT AND SERVICES

DEPARTMENT HEAD INTERVIEW FORM

**THIS BOOK
CONTAINS
NUMEROUS
PAGES THAT ARE
CUT OFF**

**THIS IS AS
RECEIVED FROM
THE CUSTOMER**

ILLEGIBLE DOCUMENT

**THE FOLLOWING
DOCUMENT(S) IS OF
POOR LEGIBILITY IN
THE ORIGINAL**

**THIS IS THE BEST
COPY AVAILABLE**

SURVEY OF AUDIO-VISUAL EQUIPMENT AND SERVICES

Department _____ (1-3) College _____ (4)
 Person Responding to Survey _____ (5-6) Title _____

In order to assess the efficiency of various types of Audio-Visual equipment and to identify common problems related to Audio-Visual equipment usage, please answer the following questions using the list below as a reference. Check the equipment you presently have.

PROJECTION EQUIPMENT

- (7) ☐ 16mm Film Projectors
 (8) ☐ 8mm Film Projectors
 (9) ☐ Film Loop Projectors
 (10) ☐ Slide Projectors
 (11) ☐ Filmstrip/Sound Projectors
 (12) ☐ Silent Filmstrip Projectors
 (13) ☐ Multi-media Viewers
 (14) ☐ Opaque Projectors
 (15) ☐ Overhead Projectors
 (16) ☐ Microfiche Reader
 (17) ☐ Programmed Instructional Equipment
 (18) ☐ Micro Projector

CAMERAS

- (40) ☐ Polaroid Cameras
 (41) ☐ 35mm Slide Cameras
 (42) ☐ 16mm Movie Cameras
 (43) ☐ 8mm Movie Cameras
 (44) ☐ 8mm Movie Cameras with Sound
 (45) ☐ Photographic Enlarger

AUDIO EQUIPMENT

- (19) ☐ Cassette Recorders
 (20) ☐ Reel to Reel Recorders
 (21) ☐ Record Players
 (22) ☐ Turntables
 (23) ☐ Bulk Eraser
 (24) ☐ Cassette Duplicator
 (25) ☐ Tape Splicer
 (26) ☐ Listening Centers
 (27) ☐ Radio Receiver
 (28) ☐ Audio Mixer
 (29) ☐ Slide/Sound SYNC Recorder
 (30) ☐ P.A. Systems

DUPLICATING

- (46) ☐ Mimeographing
 (47) ☐ Spirit Duplicator
 (48) ☐ Multilith Duplicator
 (49) ☐ Slide Duplicator
 (50) ☐ Copy Stand Duplicator
 (51) ☐ Microfiche Duplicator
 (52) ☐ Electronic Stenciler
 (53) ☐ Photograph Modifier
 (54) ☐ Microfilm Reader

VIDEO EQUIPMENT

- (31) ☐ TV B/W Cameras
 (32) ☐ TV Color Cameras
 (33) ☐ 1" Video Tape Recorder
 (34) ☐ 1/2" Video Tape Recorder
 (35) ☐ 3/4" Cassette Video Tape Recorder
 (36) ☐ 1/2" Cassette Video Tape Recorder
 (37) ☐ Portable Video Recorder
 (38) ☐ TV Monitors
 (39) ☐ TV Image Magnifier

OTHERS

- (55) ☐ Teaching Machine
 (56) ☐ Student Response Center
 (57) ☐ Diazo
 (58) ☐ Dry Mount Press
 (59) ☐ Microfiche Printer
 (60) ☐ Sign Maker
 (61) ☐ Projection Screens
 (62) ☐ Projection Carts
 (63) ☐ Rear Projection Screen
 (64) ☐ Offset Printing

AUDIO-VISUAL SOFTWARE AND SERVICES

____ (1-3)
 ____ (4)

COMMERCIAL MATERIALS

- (5) ☐ 16mm Films
 (6) ☐ 8mm Films
 (7) ☐ Film Loops
 (8) ☐ 2X2 Slides
 (9) ☐ Film Strips-Silent
 (10) ☐ Film Strips-Sound
 (11) ☐ Multi-Media Kits
 (12) ☐ Prepared Transparencies
 (13) ☐ Micro Film
 (14) ☐ Disc Recording
 (15) ☐ Pre-recorded Audio Cassettes
 (16) ☐ Blank Cassettes
 (17) ☐ Pre-recorded Reel to Reel Audio Tapes
 (18) ☐ Blank Reel to Reel
 (19) ☐ Pre-recorded Reel to Reel Video Tapes
 (20) ☐ Blank Reel to Reel Video Tapes
 (21) ☐ Pre-recorded Cassette Video Tape
 (22) ☐ Blank Cassette Video Tape
 (23) ☐ Flat Pictures

LOCALLY PRODUCED

- (24) ☐ 16mm Films
 (25) ☐ 8mm Films
 (26) ☐ 2X2 Slides
 (27) ☐ Filmstrips-Silent
 (28) ☐ Filmstrips-Sound
 (29) ☐ Multi-Media Kits
 (30) ☐ Prepared Transparencies
 (31) ☐ Micro Film
 (32) ☐ Audio Cassettes
 (33) ☐ Audio Reel to Reel Tape
 (34) ☐ Video Tape Cassettes
 (35) ☐ Video Tape Reel to Reel
 (36) ☐ Flat Pictures

SERVICES

- (37) ☐ Sign, Chart, Picture Preparation
 (38) ☐ Overhead Transparency Preparation
 (39) ☐ Video Taping Facilities
 (40) ☐ Audio Recording Facilities
 (41) ☐ Film Production
 (42) ☐ Slide Production
 (43) ☐ Filmstrip Production
 (44) ☐ Media Program Preparation
 (45) ☐ Audio Tape Duplication
 (46) ☐ Slide Duplication
 (47) ☐ Color Film Production
 (48) ☐ Programmed Instruction Production
 (49) ☐ Equipment Operation
 (50) ☐ Lettering-Sign, Chart

PLEASE LIST ANY RARE EQUIPMENT OR SERVICES NOT COVERED ABOVE:

____(1-3) DEPT

____(4)

✓ 1. Who is primarily responsible for Audio-Visual support
in your department?

____(5-25) Name _____(26-42) Title _____

____(43-44) Percent of time assigned to Audio-Visual coordination _____

____(45-46) 2. How many additional personnel are involved in
Audio-Visual support?

✓ ____ (47-57) 3. What types of equipment do you presently have but
feel there is an additional need?

Comments:

✓ ____ (58-68) 4. What types of Audio-Visual equipment that you do not
presently have would be of great advantage to your
program?

Comments:

____(69-79) 5. What types of equipment could be used occasionally
in your department to your advantage but not enough
to justify purchase?

Comments:

____(1-3)

____(4)

6. Check in order of preference, the types of Audio-Visual service your department could take greater advantage of if the financial, technical, and physical resources were available (locally produced).

____(5-6) Signs, Charts or Picture preparation (dry mount, laminating, etc.)

____(7-8) Overhead Transparency preparation

____(9-10) Video Taping _____(21-22) Media Program Preparation

____(11-12) Cable Television System _____(23-24) Audio Tape Duplication

____(13-14) Audio Recording _____(25-26) Slide Duplication

____(15-16) Film Production _____(27-28) Color Film Processing

____(17-18) Slide Production _____(29-30) Programmed Instruction

____(19-20) Filmstrip Preparation _____ Production

____(31-32) Others

____(33) 7. Do you have a facility for film storage, cleaning, and splicing? If not, how is this handled?

Comments:

____(34) 8. Do you feel that there is adequate accessibility to Audio-Visual equipment?

Comments:

____(35) 9. Do you feel there is adequate accessibility to Audio-Visual material and services?

Comments:

____(36) 10. Do you share equipment with other departments?

____(37-39) If so, what departments?

____(40-50) What equipment?

Problems and Comments:

- ✓ ____ (51) 11. Do you borrow equipment from other departments?
____ (52-54) If so, what department?
____ (55-65) What equipment?

____ (66) 12. Do you have any equipment that you are not using
that you would be willing to loan or work out an
exchange agreement with another department?
Comments:

____ (67) 13. Do you have a preventative maintenance program
where equipment is regularly cleaned and conditioned?
____ (68) If not, would it be desirable?
Comments:

____ (69-70) 14. How is the repair and maintenance of Audio-Visual
equipment handled in your department?
Comments:

____ (71) 15. Do you feel you have adequate repair service on
equipment?
Comments:

✓ 16. What does this University need to do to have
an adequate Audio-Visual program and/or service
to adequately support the instruction program
(given the present level of instructional support)?

- ____(5-15) 17. Identify the types of equipment used most often.
Comments:
- ____(6-26) 18. Identify the types of equipment used least.
Comments:
- ____(27-37) 19. What types of equipment do you have that you
feel is becoming obsolete?
Comments:
- ____(38-48) 20. Identify the pieces of equipment that require
the most repair.
Comments:
- ____(49-59) 21. Identify the types of equipment that causes the
greatest inconvenience when it fails.
Comments:

APPENDIX B

FACULTY-COURSE AUDIOVISUAL USAGE FORM

FALL 1975-76 COURSE AUDIO VISUAL USAGE

(1-4) Line Number _____

(5) (Leave Blank) _____

(6-12) Course Number _____

(13-17) Meeting Days __ (1) Mon __ (2) Tue __ (3) Wed __ (4) Thurs __ (5) Fri

(18-20) Class Enrollment _____

Instructor _____

(21) Type __ (1) Lecture __ (2) Recitation __ (3) Lab __ (4) Demonstration

__ (5) Audio-Tutorial __ (6) Practicum or Internship

__ (7) Self-paced __ (8) Combination

On the following two scales indicate the approximate frequency of usage of Audio-Visual equipment and materials (Audio Visual shall mean equipment and material listed in questionnaire).

(40) 1. Actual Usage Scale - Approximate frequency of usage of Audio-Visual equipment and materials in the class session and/or in preparation for the class sessions (check one).

☐ (1) Most class sessions☐ (2) Three-fourths of class sessions☐ (3) One-half of class sessions☐ (4) One-fourth of class sessions☐ (5) Occasionally☐ (6) Never

(41) 2. Potential Usage Scale - Indicate the approximate frequency of usage of Audio-Visual equipment and materials in class session IF ALL EQUIPMENT AND MATERIALS ACCESSIBILITY, CLASSROOM CONDITIONS, TECHNICAL ASSISTANCE, ETC. WERE OPTIMUM (check one).

☐ (1) Most class sessions☐ (2) Three-fourths of class sessions☐ (3) One-half of class sessions☐ (4) One-fourth of class sessions☐ (5) Occasionally☐ (6) Never

On the following questions you may attach an additional page if you desire more space for your response.

3. Describe the nature of the facility that provides Audio-Visual equipment and services.

✓ (42) 4. Do you have to borrow Audio-Visual equipment from other departments? __ Yes (1) __ No (2).

If yes, what kind? _____

From what Department? _____

PROBLEMS & COMMENTS: _____

✓ (43) 5. Do you feel you have adequate accessibility to Audio-Visual equipment? __ Yes (1) __ No (2).

COMMENTS: _____

✓ (44) 6. Do you feel you have adequate accessibility to Audio-Visual materials and services? __ Yes (1) __ No (2).

COMMENTS: _____

✓ 7. Describe specific conditions or circumstances which encouraged or discouraged Audio-Visual usage?

✓ 8. What should this University do to have a better Audio-Visual program and/or service (assuming funds for instructional support do not change noticeably)?

Various types of Audio-Visual equipment and materials are listed on the next three pages. Please tell us three things about those items which are relevant to this course by indicating one response in each of the three columns. In the first column, describe frequency with which you have used the equipment. In the second column, describe the quality of the equipment or material which you have used. In the third column, indicate the degree to which the equipment or material was readily available to you.

Response codes are listed below:

Column 1 - Frequency: 1=Frequently 2=Occasionally 3=Seldom
 Column 2 - Quality: 1=Excellent 2=Adequate 3=Inadequate
 Column 3 - Availability: 1=Good 2=Usually Avail. 3=Poor

TYPE OF EQUIPMENT	FREQUENCY	QUALITY	AVAILABILITY	
16MM Film Projector	_____	_____	_____	(6-
8MM Film Projector	_____	_____	_____	(9-
Film Loop Projector	_____	_____	_____	(12
2X2 Slide Projector	_____	_____	_____	(15
Filmstrip Sound Projector	_____	_____	_____	(18
Filmstrip Silent Projector	_____	_____	_____	(21
Multi-Media Projector	_____	_____	_____	(24
Microfiche Reader	_____	_____	_____	(27
Prog. Inst. Equipment	_____	_____	_____	(30
Micro Projector	_____	_____	_____	(33
Overhead Proj.	_____	_____	_____	(72
COMMENTS ON ADEQUACY AND USAGE: _____				(7-

AUDIO EQUIPMENT	FREQUENCY	QUALITY	AVAILABILITY	
Cassette Recorder	_____	_____	_____	(36
Reel-Reel Recorder	_____	_____	_____	(39
Record Players	_____	_____	_____	(42
Turn Tables	_____	_____	_____	(45
Bulk Erasers	_____	_____	_____	(48
Cassette Duplicator	_____	_____	_____	(51
Tape Splicer	_____	_____	_____	(54
Listening Center	_____	_____	_____	(57
Radio Receiver	_____	_____	_____	(60
Audio Mixer	_____	_____	_____	(63
Slide/Sound SYNC	_____	_____	_____	(66
Public Address Systems	_____	_____	_____	(69
COMMENTS ON ADEQUACY AND USAGE: _____				(1-

VIDEO EQUIPMENT	FREQUENCY	QUALITY	AVAILABILITY	
Television B/W Cameras	_____	_____	_____	(6-
Television Color Cameras	_____	_____	_____	(9-
One-half Video Tape Recorder	_____	_____	_____	(12
Three-fourth Cassette VTR	_____	_____	_____	(15
One-half Cassette VTR	_____	_____	_____	(18
Port VTR (Rover)	_____	_____	_____	(21
Television Monitors	_____	_____	_____	(24
Television Image Magnifiers	_____	_____	_____	(27
COMMENTS ON ADEQUACY AND USAGE: _____				

CAMERAS	FREQUENCY	QUALITY	AVAILABILITY	
Polaroid Camera	_____	_____	_____	(30
35MM Slide Camera	_____	_____	_____	(33
16MM Movie Camera	_____	_____	_____	(36
8MM Movie Camera	_____	_____	_____	(39
8MM Movie Camera - Sound	_____	_____	_____	(42
Photographic Enlarger	_____	_____	_____	(45
COMMENTS ON ADEQUACY AND USAGE: _____				

Various types of Audio-Visual equipment and materials are listed on this page. Please tell us three things about those items which are relevant to this course by indicating one response in each of the three columns. In the first column, describe frequency with which you have used the equipment. In the second column, describe the quality of the equipment or material which you have used. In the third column, indicate the degree to which the equipment or material was readily available to you.

Response codes are listed below:

Column 1 - Frequency: 1=Frequently 2=Occasionally 3=Seldom
 Column 2 - Quality: 1=Excellent 2=Adequate 3=Inadequate
 Column 3 - Availability: 1=Good 2=Usually Avail. 3=Poor

	<u>FREQUENCY</u>	<u>QUALITY</u>	<u>AVAILABILITY</u>	
TYPE OF SERVICES				
Sign, Chart, Picture Preparation	_____	_____	_____	(45-47)
Overhead Transparency Preparation	_____	_____	_____	(48-50)
Audio Record Preparation	_____	_____	_____	(51-53)
Slide Production	_____	_____	_____	(54-56)
Film Production	_____	_____	_____	(57-59)
Filmstrip Preparation	_____	_____	_____	(60-62)
Media Program Preparation	_____	_____	_____	(63-65)
Audio Tape Duplication	_____	_____	_____	(66-68)
Color Film Process	_____	_____	_____	(69-71)
Program Instr Prod	_____	_____	_____	(72-74)
Equipment Operators	_____	_____	_____	(75-77)
Letter, Sign, Poster	_____	_____	_____	(78-80)

COMMENTS ON USAGE AND ADEQUACY: _____

APPENDIX C

COMPUTER PROGRAM

for

FACULTY-COURSE AUDIOVISUAL USAGE FORM

PACKAGE FOR THE SOCIAL SCIENCES SPSSH - RELEASE 6.02

06/21/76

ICE ALLOCATION FOR THIS RUN..

58

TOTAL AMOUNT REQUESTED 80000 BYTES

DEFAULT TRANSACE ALLOCATION 10000 BYTES

MAX NO OF TRANSFORMATIONS PERMITTED 100

MAX NO OF RECODE VALUES 400

MAX NO OF ARITHM.OR LOG.OPERATIONS 800

RESULTING WORKSPACE ALLOCATION 70000 BYTES

RUN NAME RON MOORE FALL 1975-76 COURSE AUDIO VISUAL USAGE
 VARIABLE LIST COLL,CNUM, ENROL,TYPE,AUSAGE,PUSAGE,BORROW,ACC43,ACC44,
 FREQ1 TO FREQ24,QUAL1 TO QUAL24,AVAIL1 TO AVAIL24,
 FREQ25 TO FREQ48,QUAL25 TO QUAL48,AVAIL25 TO AVAIL48,
 FREQ49 TO FREQ67,QUAL49 TO QUAL67,AVAIL49 TO AVAIL67,
 FREQ68 TO FREQ92,QUAL68 TO QUAL92,AVAIL68 TO AVAIL92
 INPUT MEDIUM DISK
 N OF CASES UNKNOWN
 INPUT FORMAT FIXED(T6,F1.0,T10,F3.0,T13,F3.0,F1.0,T40,5F1.0),
 /T6,24(F1.0,2X),T6,24(1X,F1.0,1X),T6,24(1X,F1.0),
 /T6,24(F1.0,2X),T6,24(1X,F1.0,1X),T6,24(2X,F1.0),
 /T6,19(F1.0,2X),T6,19(1X,F1.0,1X),T6,19(2X,F1.0),
 /T6,25(F1.0,2X),T6,25(1X,F1.0,1X),T6,25(2X,F1.0))

ACCORDING TO YOUR INPUT FORMAT, VARIABLES ARE TO BE READ AS FOLLOWS

VARIABLE	FORMAT	RECORD	COLUMNS
COLL	F 1. 0	1	6- 6
CNUM	F 3. 0	1	10- 12
ENROL	F 3. 0	1	19- 20
TYPE	F 1. 0	1	21- 21
AUSAGE	F 1. 0	1	40- 40
PUSAGE	F 1. 0	1	41- 41
BORROW	F 1. 0	1	42- 42
ACC43	F 1. 0	1	43- 43
ACC44	F 1. 0	1	44- 44
FREQ1	F 1. 0	2	6- 6
FREQ2	F 1. 0	2	9- 9
FREQ3	F 1. 0	2	12- 12
FREQ4	F 1. 0	2	15- 15
FREQ5	F 1. 0	2	18- 18
FREQ6	F 1. 0	2	21- 21

FALL 1975-76 COURSE AUDIO VISUAL USAGE

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ACCORDING TO YOUR INPUT FORMAT, VARIABLES ARE TO BE READ AS FOLLOWS

VARIABLE FORMAT RECORD COLUMNS

FREQ7	F 1. 0	2	24- 24
FREQ8	F 1. 0	2	27- 27
FREQ9	F 1. 0	2	30- 30
FREQ10	F 1. 0	2	33- 33
FREQ11	F 1. 0	2	36- 36
FREQ12	F 1. 0	2	39- 39
FREQ13	F 1. 0	2	42- 42
FREQ14	F 1. 0	2	45- 45
FREQ15	F 1. 0	2	48- 48
FREQ16	F 1. 0	2	51- 51
FREQ17	F 1. 0	2	54- 54
FREQ18	F 1. 0	2	57- 57
FREQ19	F 1. 0	2	60- 60
FREQ20	F 1. 0	2	63- 63
FREQ21	F 1. 0	2	66- 66
FREQ22	F 1. 0	2	69- 69
FREQ23	F 1. 0	2	72- 72
FREQ24	F 1. 0	2	75- 75
QUAL1	F 1. 0	2	7- 7
QUAL2	F 1. 0	2	10- 10
QUAL3	F 1. 0	2	13- 13
QUAL4	F 1. 0	2	16- 16
QUAL5	F 1. 0	2	19- 19
QUAL6	F 1. 0	2	22- 22
QUAL7	F 1. 0	2	25- 25
QUAL8	F 1. 0	2	28- 28
QUAL9	F 1. 0	2	31- 31
QUAL10	F 1. 0	2	34- 34
QUAL11	F 1. 0	2	37- 37
QUAL12	F 1. 0	2	40- 40
QUAL13	F 1. 0	2	43- 43
QUAL14	F 1. 0	2	46- 46
QUAL15	F 1. 0	2	49- 49
QUAL16	F 1. 0	2	52- 52
QUAL17	F 1. 0	2	55- 55
QUAL18	F 1. 0	2	58- 58
QUAL19	F 1. 0	2	61- 61
QUAL20	F 1. 0	2	64- 64
QUAL21	F 1. 0	2	67- 67
QUAL22	F 1. 0	2	70- 70
QUAL23	F 1. 0	2	73- 73
QUAL24	F 1. 0	2	76- 76

FALL 1975-76 COURSE AUDIO VISUAL USAGE

05/21/77

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ACCORDING TO YOUR INPUT FORMAT, VARIABLES ARE TO BE READ AS FOLLOWS

VARIABLE	FORMAT	RECORD	COLUMNS
----------	--------	--------	---------

AVAIL1	F 1. 0	2	8- 8
AVAIL2	F 1. 0	2	11- 11
AVAIL3	F 1. 0	2	14- 14
AVAIL4	F 1. 0	2	17- 17
AVAIL5	F 1. 0	2	20- 20
AVAIL6	F 1. 0	2	23- 23
AVAIL7	F 1. 0	2	26- 26
AVAIL8	F 1. 0	2	29- 29
AVAIL9	F 1. 0	2	32- 32
AVAIL10	F 1. 0	2	35- 35
AVAIL11	F 1. 0	2	38- 38
AVAIL12	F 1. 0	2	41- 41
AVAIL13	F 1. 0	2	44- 44
AVAIL14	F 1. 0	2	47- 47
AVAIL15	F 1. 0	2	50- 50
AVAIL16	F 1. 0	2	53- 53
AVAIL17	F 1. 0	2	56- 56
AVAIL18	F 1. 0	2	59- 59
AVAIL19	F 1. 0	2	62- 62
AVAIL20	F 1. 0	2	65- 65
AVAIL21	F 1. 0	2	68- 68
AVAIL22	F 1. 0	2	71- 71
AVAIL23	F 1. 0	2	74- 74
AVAIL24	F 1. 0	2	77- 77
FREQ25	F 1. 0	3	6- 6
FREQ26	F 1. 0	3	9- 9
FREQ27	F 1. 0	3	12- 12
FREQ28	F 1. 0	3	15- 15
FREQ29	F 1. 0	3	18- 18
FREQ30	F 1. 0	3	21- 21
FREQ31	F 1. 0	3	24- 24
FREQ32	F 1. 0	3	27- 27
FREQ33	F 1. 0	3	30- 30
FREQ34	F 1. 0	3	33- 33
FREQ35	F 1. 0	3	36- 36
FREQ36	F 1. 0	3	39- 39
FREQ37	F 1. 0	3	42- 42
FREQ38	F 1. 0	3	45- 45
FREQ39	F 1. 0	3	48- 48
FREQ40	F 1. 0	3	51- 51
FREQ41	F 1. 0	3	54- 54
FREQ42	F 1. 0	3	57- 57

FALL 1975-76 COURSE AUDIO VISUAL USAGE

06/21

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ACCORDING TO YOUR INPUT FORMAT, VARIABLES ARE TO BE READ AS FOLLOWS

VARIABLE	FORMAT	RECORD	COLUMNS
FREQ43	F 1. 0	3	60- 60
FREQ44	F 1. 0	3	63- 63
FREQ45	F 1. 0	3	66- 66
FREQ46	F 1. 0	3	69- 69
FREQ47	F 1. 0	3	72- 72
FREQ48	F 1. 0	3	75- 75
QUAL25	F 1. 0	3	7- 7
QUAL26	F 1. 0	3	10- 10
QUAL27	F 1. 0	3	13- 13
QUAL28	F 1. 0	3	16- 16
QUAL29	F 1. 0	3	19- 19
QUAL30	F 1. 0	3	22- 22
QUAL31	F 1. 0	3	25- 25
QUAL32	F 1. 0	3	28- 28
QUAL33	F 1. 0	3	31- 31
QUAL34	F 1. 0	3	34- 34
QUAL35	F 1. 0	3	37- 37
QUAL36	F 1. 0	3	40- 40
QUAL37	F 1. 0	3	43- 43
QUAL38	F 1. 0	3	46- 46
QUAL39	F 1. 0	3	49- 49
QUAL40	F 1. 0	3	52- 52
QUAL41	F 1. 0	3	55- 55
QUAL42	F 1. 0	3	58- 58
QUAL43	F 1. 0	3	61- 61
QUAL44	F 1. 0	3	64- 64
QUAL45	F 1. 0	3	67- 67
QUAL46	F 1. 0	3	70- 70
QUAL47	F 1. 0	3	73- 73
QUAL48	F 1. 0	3	76- 76
AVAIL25	F 1. 0	3	8- 8
AVAIL26	F 1. 0	3	11- 11
AVAIL27	F 1. 0	3	14- 14
AVAIL28	F 1. 0	3	17- 17
AVAIL29	F 1. 0	3	20- 20
AVAIL30	F 1. 0	3	23- 23
AVAIL31	F 1. 0	3	26- 26
AVAIL32	F 1. 0	3	29- 29
AVAIL33	F 1. 0	3	32- 32
AVAIL34	F 1. 0	3	35- 35
AVAIL35	F 1. 0	3	38- 38
AVAIL36	F 1. 0	3	41- 41

FALL 1975-76 COURSE AUDIO VISUAL USAGE

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ACCORDING TO YOUR INPUT FORMAT, VARIABLES ARE TO BE READ AS FOLLOWS

VARIABLE	FORMAT	RECORD	COLUMNS
AVAIL37	F 1. 0	3	44- 44
AVAIL38	F 1. 0	3	47- 47
AVAIL39	F 1. 0	3	50- 50
AVAIL40	F 1. 0	3	53- 53
AVAIL41	F 1. 0	3	56- 56
AVAIL42	F 1. 0	3	59- 59
AVAIL43	F 1. 0	3	62- 62
AVAIL44	F 1. 0	3	65- 65
AVAIL45	F 1. 0	3	68- 68
AVAIL46	F 1. 0	3	71- 71
AVAIL47	F 1. 0	3	74- 74
AVAIL48	F 1. 0	3	77- 77
FREQ49	F 1. 0	4	6- 6
FREQ50	F 1. 0	4	9- 9
FREQ51	F 1. 0	4	12- 12
FREQ52	F 1. 0	4	15- 15
FREQ53	F 1. 0	4	18- 18
FREQ54	F 1. 0	4	21- 21
FREQ55	F 1. 0	4	24- 24
FREQ56	F 1. 0	4	27- 27
FREQ57	F 1. 0	4	30- 30
FREQ58	F 1. 0	4	33- 33
FREQ59	F 1. 0	4	36- 36
FREQ60	F 1. 0	4	39- 39
FREQ61	F 1. 0	4	42- 42
FREQ62	F 1. 0	4	45- 45
FREQ63	F 1. 0	4	48- 48
FREQ64	F 1. 0	4	51- 51
FREQ65	F 1. 0	4	54- 54
FREQ66	F 1. 0	4	57- 57
FREQ67	F 1. 0	4	60- 60
QUAL49	F 1. 0	4	7- 7
QUAL50	F 1. 0	4	10- 10
QUAL51	F 1. 0	4	13- 13
QUAL52	F 1. 0	4	16- 16
QUAL53	F 1. 0	4	19- 19
QUAL54	F 1. 0	4	22- 22
QUAL55	F 1. 0	4	25- 25
QUAL56	F 1. 0	4	28- 28
QUAL57	F 1. 0	4	31- 31
QUAL58	F 1. 0	4	34- 34
QUAL59	F 1. 0	4	37- 37

FALL 1975-76 COURSE AUDIO VISUAL USAGE

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ACCORDING TO YOUR INPUT FORMAT, VARIABLES ARE TO BE READ AS FOLLOWS

VARIABLE FORMAT RECORD COLUMNS

QUAL60	F 1. 0	4	40- 40
QUAL61	F 1. 0	4	43- 43
QUAL62	F 1. 0	4	46- 46
QUAL63	F 1. 0	4	49- 49
QUAL64	F 1. 0	4	52- 52
QUAL65	F 1. 0	4	55- 55
QUAL66	F 1. 0	4	58- 58
QUAL67	F 1. 0	4	61- 61
AVAIL49	F 1. 0	4	8- 3
AVAIL50	F 1. 0	4	11- 11
AVAIL51	F 1. 0	4	14- 14
AVAIL52	F 1. 0	4	17- 17
AVAIL53	F 1. 0	4	20- 20
AVAIL54	F 1. 0	4	23- 23
AVAIL55	F 1. 0	4	26- 26
AVAIL56	F 1. 0	4	29- 29
AVAIL57	F 1. 0	4	32- 32
AVAIL58	F 1. 0	4	35- 35
AVAIL59	F 1. 0	4	38- 38
AVAIL60	F 1. 0	4	41- 41
AVAIL61	F 1. 0	4	44- 44
AVAIL62	F 1. 0	4	47- 47
AVAIL63	F 1. 0	4	50- 50
AVAIL64	F 1. 0	4	53- 53
AVAIL65	F 1. 0	4	56- 56
AVAIL66	F 1. 0	4	59- 59
AVAIL67	F 1. 0	4	62- 62
FREQ68	F 1. 0	5	6- 6
FREQ69	F 1. 0	5	9- 9
FREQ70	F 1. 0	5	12- 12
FREQ71	F 1. 0	5	15- 15
FREQ72	F 1. 0	5	18- 18
FREQ73	F 1. 0	5	21- 21
FREQ74	F 1. 0	5	24- 24
FREQ75	F 1. 0	5	27- 27
FREQ76	F 1. 0	5	30- 30
FREQ77	F 1. 0	5	33- 33
FREQ78	F 1. 0	5	36- 36
FREQ79	F 1. 0	5	39- 39
FREQ80	F 1. 0	5	42- 42
FREQ81	F 1. 0	5	45- 45
FREQ82	F 1. 0	5	48- 48

FALL 1975-76 COURSE AUDIO VISUAL USAGE

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ACCORDING TO YOUR INPUT FORMAT, VARIABLES ARE TO BE READ AS FOLLOWS

VARIABLE FORMAT RECORD COLUMNS

FREQ83	F 1. 0	5	51- 51
FREQ84	F 1. 0	5	54- 54
FREQ85	F 1. 0	5	57- 57
FREQ86	F 1. 0	5	60- 60
FREQ87	F 1. 0	5	63- 63
FREQ88	F 1. 0	5	66- 66
FREQ89	F 1. 0	5	69- 69
FREQ90	F 1. 0	5	72- 72
FREQ91	F 1. 0	5	75- 75
FREQ92	F 1. 0	5	78- 78
QUAL63	F 1. 0	5	7- 7
QUAL69	F 1. 0	5	10- 10
QUAL70	F 1. 0	5	13- 13
QUAL71	F 1. 0	5	16- 16
QUAL72	F 1. 0	5	19- 19
QUAL73	F 1. 0	5	22- 22
QUAL74	F 1. 0	5	25- 25
QUAL75	F 1. 0	5	28- 28
QUAL76	F 1. 0	5	31- 31
QUAL77	F 1. 0	5	34- 34
QUAL78	F 1. 0	5	37- 37
QUAL79	F 1. 0	5	40- 40
QUAL80	F 1. 0	5	43- 43
QUAL81	F 1. 0	5	46- 46
QUAL82	F 1. 0	5	49- 49
QUAL83	F 1. 0	5	52- 52
QUAL84	F 1. 0	5	55- 55
QUAL85	F 1. 0	5	58- 58
QUAL86	F 1. 0	5	61- 61
QUAL87	F 1. 0	5	64- 64
QUAL88	F 1. 0	5	67- 67
QUAL89	F 1. 0	5	70- 70
QUAL90	F 1. 0	5	73- 73
QUAL91	F 1. 0	5	76- 76
QUAL92	F 1. 0	5	79- 79
AVAIL63	F 1. 0	5	8- 8
AVAIL69	F 1. 0	5	11- 11
AVAIL70	F 1. 0	5	14- 14
AVAIL71	F 1. 0	5	17- 17
AVAIL72	F 1. 0	5	20- 20
AVAIL73	F 1. 0	5	23- 23
AVAIL74	F 1. 0	5	26- 26

FALL 1975-76 COURSE AUDIT VISUAL USAGE

06/21/76

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ACCORDING TO YOUR INPUT FORMAT, VARIABLES ARE TO BE READ AS FOLLOWS

VARIABLE FORMAT RECORD COLUMNS

AVAIL75	F 1. 0	5	29- 29
AVAIL76	F 1. 0	5	32- 32
AVAIL77	F 1. 0	5	35- 35
AVAIL78	F 1. 0	5	38- 38
AVAIL79	F 1. 0	5	41- 41
AVAIL80	F 1. 0	5	44- 44
AVAIL81	F 1. 0	5	47- 47
AVAIL82	F 1. 0	5	50- 50
AVAIL83	F 1. 0	5	53- 53
AVAIL84	F 1. 0	5	56- 56
AVAIL85	F 1. 0	5	59- 59
AVAIL86	F 1. 0	5	62- 62
AVAIL87	F 1. 0	5	65- 65
AVAIL88	F 1. 0	5	68- 68
AVAIL89	F 1. 0	5	71- 71
AVAIL90	F 1. 0	5	74- 74
AVAIL91	F 1. 0	5	77- 77
AVAIL92	F 1. 0	5	80- 80

FORMAT PROVIDES FOR 235 VARIABLES. 235 WILL BE READ
 5 RECORDS (5 CARDS) PER CASE. A MAXIMUM OF 80 COLUMNS ARE USED IN A RECORD.

RECORD CNUM (000 THRU 299=1) (300 THRU 699=2) (700 THRU 999=3) /
 ENROL (0 THRU 19=1) (20 THRU 99=2) (100 THRU 999=3)
 VAR LABELS USAGE ACTUAL USAGE SCALE /
 USAGE POTENTIAL USAGE SCALE /
 COLL KSU COLLEGES
 VALUE LABELS CNUM (1) 000-299 (2) 300-699 (3) 700-999 /
 ENROL (1) SMALL 0-19 (2) MEDIUM 20-99 (3) LARGE 100-999 /
 TYPE (1) LECTURE (2) RECITATION (3) LAB (4) DEMONSTRATION
 (5) AUDIO-TUT (6) PRACT-INTERN (7) SELF-PACED (8) COMBINATION /
 USAGE PUSAGE (1) 1ST CLASSES (2) 3-4 OF CLASSES
 (3) 1-2 OF CLASSES (4) 1-4 OF CLASSES (5) OCCASIONALLY (6) /
 BORROW TO ACC44 (0) BLANK (1) YES (2) NO /
 FREQ1 TO FREQ24 FREQ25 TO FREQ43 FREQ43 TO FREQ67
 FREQ68 TO FREQ92 (1) FREQUENTLY (2) OCCASIONALLY (3) Seldom
 (0) BLANK /
 QUAL1 TO QUAL24 QUAL25 TO QUAL48 QUAL49 TO QUAL67
 QUAL68 TO QUAL92 (1) EXCELLENT (2) ADEQUATE (3) INADEQUATE (0) BLANK /
 AVAIL1 TO AVAIL24 AVAIL25 TO AVAIL48 AVAIL49 TO AVAIL67
 AVAIL68 TO AVAIL92 (1) GOOD (2) USUALLY AVAIL (3) POOR (0) BLANK /
 COLL (0) AGRICULTURE (1) ARCHITECTURE (2) ARTS/SCIENCE
 (3) BUSINESS (4) EDUCATION (5) ENGINEERING (6) HOME EC (7) VET /

READ INPUT DATA

ENDING 324 CASES FROM SUBFILE NONAME , END OF FILE WAS ENCOUNTERED ON LOGICAL UNIT 1

RON MOORE FALL 1975-76 COURSE AUDIO VISUAL USAGE

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FREQUENCIES INTEGER=COLL(0,7) CNJM(1,3) ENRM(1,3) TYPE(0,1)
 AUSAGE PUSAGE(0,6) BORROW TO ACC44(0,2)
 FREQL TO AVAIL92(0,3)

'FREQUENCIES' PROBLEM REQUIRES 4734 BYTES OF SPACE

AN ANALYSIS OF THE LEVEL OF POTENTIAL USAGE OF AUDIOVISUAL
EQUIPMENT, MATERIALS AND SERVICES AT KANSAS STATE UNIVERSITY

by

RONALD LEE MOORE

B. S., Marion College, 1970

AN ABSTRACT OF A MASTER'S THESIS

submitted in partial fulfillment of the
requirements for the degree

MASTER OF SCIENCE

College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1976

ABSTRACT

This study was conducted at Kansas State University to determine the level of usage of audiovisual equipment, materials and services. It involved interviewing all the department heads and randomly surveying courses to determine the level of usage both actual and potential. By using potential and actual usage scales and comparing them a pattern of usage was constructed and a growth potential projected.

An analysis of variance was used to determine if the level of potential usage was significant with respect to class size (small, medium, large), class type (laboratory, lecture, recitation), and level of instruction (lower division, upper division, graduate division). There was no significant difference in the level of potential usage for class type and level of instruction, however there was a significant difference with respect to the size of class. There was a significant difference between small and large classes, small and medium classes, and medium and large classes. A comparison of the actual usage scale and the potential usage scale revealed that 44% would increase usage if conditions were optimum. Analyses of accessibility of equipment, materials and services were also conducted.

From this investigation, recommendations were made for a Kansas State University audiovisual program. Suggestions were made for future studies that would assess the level of usage, both potential and actual.