The Commission on Instructional Technology identified several formidable obstacles which have prevented the successful use of communications technology in instruction. Many of these obstacles are particularly relevant to the organization and staffing of educational communications centers at colleges and universities.

Educational communications centers have professional and technical personnel, material, facilities and equipment, and funds to improve communications within the research, teaching, and public service programs on campus. The three major activities of such a center are 1) supporting academic departments seeking to improve their instructional programs, 2) providing communications services to all functions and activities of the campus, and 3) serving as a laboratory environment to support academic programs in the communications arts and sciences or in the field of education. A model educational communications center would include research and development activities; production, engineering, and operations services; and general administrative services. The functional job areas and classification level of all positions and personnel who are required within the center are defined according to their specialized area and level of performance. Organizational charts and salary schedules for a model educational communications center are appended. (JY)
GETTING IT ALL TOGETHER

The Organization and Staffing of Educational Communications Centers for Higher Education

A Paper Delivered to the National Association of Educational Broadcasters 47th Annual Convention

October 18, 1971
Miami Beach, Florida

David A. Humphrey
Office of Educational Development
State University of New York
Albany, New York

I have entitled this presentation, "Getting It All Together," because, during the next thirty minutes, I wish to present to you a model plan which has been developed for organizing and staffing Educational Communications Centers.

The plan itself consists of three basic parts: A Program Organization, A Functional Organization and A Staffing Organization, complete with the total staffing plan necessary to get it all together.

The process of organizing and staffing an Educational Communications Center is not a singular one—it depends on a number of factors. Therefore, before we can arrive at the solution, we must give serious consideration to these factors, often philosophies, and they must be dealt with accordingly.

In the development of our model we must first recognize what an Educational Communications Center is, what purpose it has, how it fits within the academic environment, what it is
supposed to do, how it should do it, what resources it needs in order to accomplish the assignment, and the problems faced. It may prove somewhat painful.

Let's begin with the ultimate home of an Educational Communications Center, the campus of an institution of higher education.

The basic functions of a college or university are usually described as Research, Teaching and Public Service. If we change the language a bit we find that institutions of higher education are established to create knowledge, communicate knowledge and apply knowledge to the solution of public problems. Certainly, a central purpose of a university is teaching, and teaching is intimately connected with the communication of knowledge.

It might seem somewhat strange, then, that colleges and universities have not made much use of communications technology in their educational programs. New communications instruments have been developed and refined at a steady pace in the past hundred years. The telephone, phonograph, motion picture, radio, television, tape recorder, and the computer have changed the manner and modes of human communication within a short span of time. While the means of communication within the larger society have changed and developed rapidly, the techniques and tools of communication within the academic community during this same century have remained much the same as they always were.

The Commission on Instructional Technology, in their report to the President and Congress of the United States,
identified several formidable obstacles which have prevented the successful use of communications technology in instruction.

Most of these barriers we can all readily identify: the pervasive conservatism of the education establishment, a lack of administrative commitment to change, budgetary and financial difficulties, and equipment deficiencies.

There are more. The others, barriers also identified by the Commission, are particularly relevant to the subject today, the organization and staffing of Educational Communications Centers.

Cited by the Commission as additional problems faced by the educational community concerning communications technology are:

First—A lack of specialists—they say, "The lack of specialists to facilitate technology's use in schools and colleges could well be the Achilles' heel of Instructional Technology."

Second—Those technology specialists that we do have are excluded from central planning. The commission stated, and I quote, "If media specialists are consulted about curriculum and organization at all, it is usually after key decisions have been made. As a result, schools and colleges usually make little effort to weave new kinds of materials and modes of instruction into the fabric of the institution..."

Third—A lack of quality software. Quoting the Commission again, they report that, "The insufficiency of excellent materials or programs has been a critical and persistent
factor in preventing the development of a genuinely effective Instructional Technology". This is, I submit, a direct by-product of the previously noted obstacles.

Finally--The reward system within higher education. Presently the reward systems we have within the higher educational establishment, including tenure, promotion, and salary, usually are received by those most productive in terms of research and publication. Teaching effectiveness, or improving the quality of instruction, is rarely specifically indicated as criteria for merit notices or rewards.

All of these problems are important, but the last three mentioned relate directly to staffing an Educational Communications Center. They shall be dealt with in more detail as we progress.

Although communications media have had little impact on higher education, there has been a decided growth in the use of media since the end of the Second World War. This was a boom period for higher education and although most of the funds were available for the expansion of conventional instruction some funds were available for media. For instance, the number and size of TV studios, AV services and language labs, etc. have increased. However, as the Mc Murrin Report also pointed out "In nearly every case, these media have entered education independently, and still operate more in isolation that in combination."

Recently there has been a new trend, the birth of a new organizational unit within the academic community, the
Educational Communications Center, Instructional Resources Center, Learning Resources, etc. The principal motives behind the formation of these centers is to bring the communications media together.

Generally speaking, the mission or purpose of an Educational Communications Center is to improve communications within the research, teaching and public service programs of a campus.

An Educational Communications Center is composed of professional, technical and clerical personnel, who form a group of education and communications specialists, that can provide the resources necessary for the improvement of communication by the educational use of communications media throughout the campus.

Both the concept and reality of Educational Communications Centers, have, for all intents and purposes, generally grown out of existing audiovisual or television programs, and their design and flavor has definitely been in most cases toward a communications services orientation. This orientation, of course, is toward servicing ongoing instructional programs, accomplished in the main by providing faculty with the communications services they need to conduct instruction in more or less conventional ways.

Although the Educational Communications Centers have grown up from AV and TV, and have been the "pieces" of instructional technology, we can now see a new orientation, one which has resulted from getting all the communications technology together.
This new orientation to the responsibilities of Educational Communications, which has in part been brought about by an increased awareness and use of media by faculty, students and administrators, consequently effects a need for us to reassess our activities.

In accomplishing this reorientation to Educational Communications we find that there are three major activities in which a communications center, or any campus media program for that matter, may engage. Stated in a priority order, these activities are:

First--The communications center provides Educational Communications support to academic departments for the improvement of their instructional programs. In the fulfillment of this responsibility they become the support organization necessary to assist academic departments in making the transition from conventional patterns to new patterns of instruction. This leads us to the concept of Instructional Development, which stated in its simplest form, is the re-orientation and reorganization of a course of instruction.

It involves a thorough course content analysis, the development of instructional objectives and a determination of the most effective ways to achieve those objectives. This usually involves separating the course into units or modules for presentation. This is the point at which the various communications technologies themselves become of increasing importance. We get involved with some television, some independent study, some large-group instruction and some audio-tutorial to name but a few.
Second--The provision of communications services to all functions and activities of the campus, including Research Continuing Education, Public Service, Student Services and General Administration, in addition to Instruction. Educational Communications Services are basic to the Educational Communications Center.

Three--The center may provide a laboratory environment that supports academic programs in the communications arts and sciences or in the field of education. Although major curricula in communications and education are likely to require some separate facilities for instruction, the communications center provides an operational environment where students can receive training and practice in the use of communications media.

Therefore, the objectives that I would suggest for an Educational Communications Center program are: 1. To assist academic departments in developing and improving their Instructional Programs, 2. To enable all campus programs to make use of new communication media within the campus community and between the campus and external publics, and 3. To provide education and training in the educational uses of media for students, faculty and administration.

Next we must consider the resources required for a communications program. These resources are required regardless of your own particular priorities; regardless of the size of your campus; regardless of the scope of your program; and even regardless of whether a centralized communications
program exists or not—that is, these resources hold for each of the various media programs which may exist.

The essential resources for the use of communications technology in instruction must be available to the faculty, administration and students of each campus.

Four kinds of resources are necessary:

1. Professional and technical communications personnel (Men)
2. Materials
3. Facilities and equipment (Machines)
4. Financial (Money)

Now that we are aware of the objectives (tasks to be accomplished) and the resources needed for an Educational Communications Center, the question now is how do we organize these resources to accomplish the objectives.

The objectives of an Educational Communications Center initially reflect the elements of the ECC Program, which in turn should be reflected in the structure and personnel of the center.

Stated in a simpler, yet much more direct manner, these objectives incorporated into a program organization would be stated as:

1. Instructional Research and Development;
2. Educational Communications Services;
3. Education and Training;
4. And we need a fourth function to coordinate and manage the three—General Administration
The program organization just suggested reflects the major elements with which the center should be concerned.

At this point we should expand somewhat on the three basic program elements of an Educational Communication Center.

Instructional Communications Research and Development reflects the organization and programming of specific projects for the purpose of developing new means, methods and patterns of instructions. In almost all cases these projects are carried out in conjunction with specific academic departments.

General Educational Communications services has four major elements in their program.

1. Providing professional and technical consultation in the use of communication media to the faculty, staff and students.

2. Acquiring, producing and where appropriate, storing and distributing educational materials.

3. Planning, acquiring, operating, and maintaining Educational Communications facilities and equipment.

4. Operating campus broadcasting facilities.

The Education and Training Program has two responsibilities. The academic program of a campus, including planning, conducting and developing an Educational Communications curriculum, and a training program, which includes the offering of courses in support of the programs of other departments.

General Administration is responsible for the overall management of the Educational Communications Center, and for planning and administering the Educational Communications Center Program.
ideas concerning a plan for organizing and staffing an Edu-
cational Communications Center. The plan is comprised of
several components, and has been developed to specify personnel
requirements as they correspond to the program. The com-
ponents of this plan are three in number:

First--The development of a program organization,
consistent with the mission and program elements for which
an Educational Communications Center is responsible and the
identification of related functions for which it may assume
responsibilities;

Second--The design of a functional organization chart
which defines structural relationships within the center, and

Third--The incorporation of those appropriate functional
areas into an organizational staffing chart according to a
system of classification levels with corresponding salary
scales.

The proposals which will be offered to you are based on
several additional components:

First--An analysis of Educational Communications
Centers, as they are being operated at major universities
across the country, both in terms of their staffing and their
activities;

Second--An assessment of Educational Communications Centers
in terms of those colleges and universities which have not
organized a central communications resource; and

Third--The identification of problems which have arisen
and relate to organizational and/or staffing patterns.
The development and utilization of the model for organizing and staffing an Educational Communications Center is not quite as simple as it may have sounded at first.

The model plan for organizing and staffing an Educational Communications Center has been developed with no one particular campus or campus-type in mind. It is hoped that it would meet the needs of all types of higher education institutions. To use the classification system employed by the recent Carnegie Commission on "New Students and New Places" the types of campuses would include:

1. Universities
2. Comprehensive Colleges
3. Liberal Arts Colleges
4. Two Year Colleges and Institutes
5. Professional and Specialized Colleges

The model is not designed to fit any particular campus, but rather to provide a general framework and guidelines within which campuses can develop their own local organization and staffing plans.

We've reviewed the purpose and functions of a university, the mission of an Educational Communications Center, the activities in which it engages, and the objectives of the program under which it should operate. We have also enumerated the resources required for the use of communications technology in instruction and a statement of the suggested program with definitions of responsibility.

The model plan, which is comprised of three parts was noted initially in terms of the analysis conducted which have
influenced its development and which in turn is designed for all types of higher education institutions.

Now, let's get it all together.

The Educational Communications Center Program, when put into an organizational format, would look like this, similar to the first chart in the set of three organizational charts distributed, and is entitled, "Program Organization Chart" (See Figure I), with the General Administration responsible for the other major program elements of Instructional Research and Development, General Educational Communications Services and education and training, the latter indicated by a dotted line as it may vary in degree from one campus to another.

The Functional Organizational Chart, evolves directly from the program organization and gives initial depth to the plan. The Functional Organization, includes the major activities and elements for which an Educational Communications is responsible.

It has been developed around the program elements and illustrates the organization of the functions and their corresponding functional elements. Four functions have been identified to fulfill this program.

Under the program element Instructional Research and Development the function remains exactly the same. At this point it has not been subdivided. There are divisions which could be made and suggested logically. It is felt at this time, however, that this aspect of an Educational Communications Center, this really primary responsibility, is best left combined.
This is not so with the Educational Communications Services Program. The three additional functions have been established here to reflect the major service responsibilities.

The three service functions are: production services, engineering services, and operations services.

Each of these three functions is further defined at this point to reflect the primary activities under each.

Production Services is therefore further developed into Television, Graphics, Photography, Audio, Management, and Other.

The "Other" activity is being suggested under each of the functions to allow diversification and development of activities not ordinarily, at least presently, incorporated into an Educational Communications Center Program. In this case, production services, the "Other" might be used for computer assisted instruction.

The second function, Engineering Services, is developed according to the primary responsibilities they have:

Engineering Technical Services,
Engineering Maintenance Services,
Management, and Other.

The "Other" for Engineering is seen as an opening for an Engineering Research and Development Group.

The operations services basically takes responsibility for what formerly was referred to as Audio Visual Services.

One significant difference is the point of service separation. No longer is it Audio and Video, but now should reflect the real difference in services, that is between hardware and software.
Therefore, the proposed functional organization of operations services would be:

Educational Recordings Library,
Educational Equipment Utilization,
Management, and Other

The complete functional organization chart for an Educational Communications Center is now complete, and would be presented in the manner illustrated on the second chart in the set of organization charts distributed and is entitled "Functional Organization Chart". (See Figure II).

Following the development of a program organization and the functional organization, the next move is to determine, and establish, the kinds and types of staff which are necessary to fulfill this program and to carry out the functions therein.

In partial fulfillment of this obligation it is necessary to create a series of job classification levels, which will distinguish the various personnel talents and job requirements that exist within an Educational Communications Center.

Job classification levels which have been developed distinguish among performance levels in a given functional area. Each classification level has associated with it a salary range appropriate to the requirements, performance level, and experience demanded by each position.

Classification levels used are:

1. Director
2. Associate Director/Senior Associate
3. Assistant Director/Associate
4. Coordinator  
5. Senior Specialist  
6. Specialist  
7. Assistant  
8. Aide

To complete the organizational process these classifications must be associated with the functions established to achieve the total pattern of organization.

The functional job areas have been enumerated previously. You will recall that this criteria distinguishes among the various job areas one would find in an Educational Communications Center; such as television, graphics, engineering, research and development, etc.

By combining these two criteria, the classification level and the functional job area, all positions and personnel who are required within the center are defined according to their specialized area and level of performance.

This combining of the classification levels and the functional job areas, gives us, the staff organization for an Educational Communications Center.

The staff organization defines staff positions by classification level, functional job area and salary scales, and is composed of the criteria noted earlier, and gives us:

1. Classification Titles--Which have been specified and grouped according to two criteria:
   A. Classification Level--which is used to distinguish among the different performance levels;
B. Functional Job Areas--which distinguishes different functions, activities or responsibilities of the Educational Communications Centers.

The model organizational staffing plan for an Educational Communications Center is now complete, and is presented in a manner which corresponds to the third chart in the set of organization charts distributed, and is entitled "Organizational Staffing Chart". (See Figure III). You will note that the classification levels proposed have been listed along the left-hand margin of this chart.

2. Each classification title has also been assigned an appropriate salary range as of Fall, 1970, (See Figure IV) and

3. Job descriptions have been developed for the 65 different positions which are now part of the model organization and staffing plan.

During the course of preparing this report a variety of different aspects of current communications technology programs were analyzed. These were used extensively in the development of the proposed model in hopes that solutions could be found for existing problem areas.

The specific areas which have been checked are:

1. The nature of various communications centers and media programs which currently exist at major universities within the United States;

2. The program under which they operate;

3. The organizational and staffing plan developed for these purposes;

4. The staffing and recruitment policies and patterns employed.
5. Major difficulties which have been encountered which relate to organization and/or staffing and, if known, how they were remedied; and

6. The placement, organizationally, within the campus structure of the communications center.

As a result of this, and other more specific analysis conducted of this area, several problem areas have been identified which I consider to be of major importance in achieving appropriate personnel for Educational Communications Centers, and which the model attempts to solve.

These problem areas are two in number and relate directly to the nature of this report. They are:

1. Problems which stem from and are part of the existing organizational structures currently being employed on most campuses; and

2. Staffing problems, which in large part are derived from organizational structures and have generally evolved over time without a clear set of guidelines within which to develop.

Let's consider each of these areas separately at first, although they are considerably interwoven.

First, the organizational problems:

One: As the Educational Communications Centers have evolved there has been no formal mechanism to implement the organizational structure necessary to accomplish Instructional Research and Development.

Two: The placement of the Educational Communication Center organizationally within the overall campus structure suggests an administrative decision regarding the role which it should assume. In numerous cases this placement stems from a long-
standing tradition and has not been allowed to change. This is especially true where the center was initially considered as a solely service-oriented facility whose major function was to work with extension and public service activities.

Secondly, the problems relating to staffing. As with the organizational structure, staffing patterns have evolved over time without a clear set of guidelines within which to develop. There are several major staffing problems which have significantly affected accomplishment of an Educational Communications Center's mission.

One: Instructional Research and Development Staff, a difficulty related directly to the organizational problem mentioned. No avenue has been created in the organization and staffing of the centers for Instructional Research and Development. Consequently, staffing positions in this area have not been created, or approved and are not requested or justified by campuses.

Two: Director, Educational Communications Center--The scope and depth of the responsibilities assigned and assumed by this individual, when considered in relation to the instructional program of the campus and the level of personnel with which he interacts, are such that the appointment levels employed do not adequately reflect the performance level demanded by this position.

Three: Middle Management Personnel--Noteably absent in the analysis of existing positions in Educational Communications Centers are middle management personnel to work with the Director in accomplishment of the program elements. The
administration of a program oriented Educational Communications Center cannot be assumed by one individual.

In order to adequately plan and program an Educational Communications Center, persons with primary responsibility in the areas of budgeting, planning, coordination and the ability to collect and develop workload and utilization data are a necessity. The lack of such individuals within the centers requires those professionals assigned other responsibilities to perform those tasks normally assigned to management personnel.

Four: Functional Title Delineation--Payroll titles do not always allow for a description of the functional area to which a person is assigned. Titles appropriate to most program elements and functional areas for which an Educational Communications Center is responsible do not exist. The broad classifications used do not distinguish functional areas and this has led to the development of cumbersome, often meaningless, dual systems of job titles; one for payroll purposes and a second for internal purposes. A more precise system of classification would lead to better communication and coordination among all involved with personnel.

Five: Career Development--A problem related to the one above concerning functional classification, is the lack of a professional career development system. Existing positions are normally generated, approved and filled at a single level, without allowances for differing degrees of requirement, experience and competency. Consequently a wide variety of responsibilities, experiences and professional competencies are now found within a single classification. A career ladder system would allow positions to be established and persons
assigned in a manner which reflects campus requirements and an individual's qualifications.

This rigidity of personnel classification causes mobility to be the sole technique of promotion available and requires that a person change institutions and even states. Continuity problems result from these transfers, in addition to the loss of qualified personnel.

Six: Current Position Titles--Those payroll titles which do exist for Educational Communications appear to have been developed based on facilities and equipment, rather than program. This is indicated by several specific titles, in general use, which appear to have been generated by television: television art director, television engineer, and television producer/director. Similar patterns exist within the audio-visual field. Position titles are in need of being developed around the program.

Personnel currently employed in the field of Educational Communications, including the various media programs associated with it, according to the current use of titles, reflect statistically, the points just noted.

For example, approximately 30% of these positions are of an engineering or technical nature, and yet, ironically enough, there is less than one technical person assigned to maintenance for every million dollars of equipment investment.

57% of the existing positions may be assigned some responsibility to television. This includes producer-directors, television artists and engineering personnel.

Audio-visual, often considered as the mainstay of Educational Communications, has only about 11% of all personnel.
Audio, one of the easiest and most inexpensive instructional materials to produce, distribute and use has less than one-half of one percent of allocated positions.

Seven: Academic Appointments--In many cases personnel within Educational Communications Centers have not been given academic appointments, even though they possess the qualifications required for such appointments with academic departments. This lack of academic recognition has impeded their movement into the mainstream of the instructional process. Academic appointments for those Educational Communications personnel with the requisite credentials would facilitate the implementation of instructional change on the campus.

In summation of these problem areas, it would appear that many of them exist because of the lack of sufficient emphasis being placed on exactly what we are doing. In other words, for all too long, we have been activity oriented as opposed to function, or program oriented.

The Mc Murrin Commission stated that Instructional Technology can be defined in two ways, and I quote: "In its more familiar sense it means the media born of the communications revolution, which can be used for instructional purposes alongside the teacher, the textbook and blackboard."

The "media born of the communications revolution" includes what the commission termed the "pieces" that comprise Instructional Technology.

The Commission broadened the scope of this widespread understanding when they continued by providing another interpretation. "The second and less familiar definition of
Instructional Technology goes beyond any particular medium or device. In this sense, Instructional Technology is more than the sum of its parts. It is a systematic way of designing, carrying out and evaluating the total process of learning and teaching in terms of specific objectives...and employing a combination of human and nonhuman resources to bring about more effective instruction."

They concluded by suggesting that the widespread acceptance and application of the broad second definition belongs to the future.

Author John Gardner has made a similar observation when he stated, and I quote, "We have already developed and tested many of the ingredients of what will be a new era in education. But the pieces of the educational revolution are lying around unassembled."

Let's assign ourselves the task of "Getting It All Together".
FIGURE I
PROGRAM ORGANIZATION CHART
EDUCATIONAL COMMUNICATIONS CENTER

GENERAL ADMINISTRATION
Responsible for the overall management of the Educational Communications Center, and for planning and administering the Program.

EDUCATIONAL COMMUNICATIONS SERVICES
Provides professional consultation in the use of communication media to the faculty, staff, and students; produces, acquires, stores and distributes educational materials; and plans, acquires, operates and maintains educational communications facilities and equipment, in support of campus teaching, research and public service programs.

ACADEMIC PROGRAM
Plans and conducts an academic program in Educational Communications including development of an Educational Communications curriculum, and/or the offering of communications courses in support of the programs of other departments.

INSTRUCTIONAL RESEARCH & DEVELOPMENT
Develops new means and methods of instruction and conducts a program of research in instructional processes.

BROADCASTING STATION
Plans, manages and operates the campus educational broadcasting station; coordinates educational radio and T.V. programming with campus, inter-campus and public broadcasting authorities.
Note: This chart is non-numerical.
### Figure IV

**Educational Communications Centers**

**Personnel Classification Levels and Salary Schedules**

*As of Fall, 1970*

<table>
<thead>
<tr>
<th>Position</th>
<th>University &amp; Professional Colleges</th>
<th>Comprehensive &amp; Liberal Arts Colleges</th>
<th>Two-Year Colleges &amp; Institutes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Director</strong></td>
<td>24,725-27,425</td>
<td>22,575-24,725</td>
<td>16,125-20,425</td>
</tr>
<tr>
<td><strong>Associate Director/Senior Associate</strong></td>
<td>22,575-24,725</td>
<td>20,425-22,575</td>
<td>16,125-17,750</td>
</tr>
<tr>
<td><strong>Assistant Director/Associate</strong></td>
<td>16,125-20,425</td>
<td>16,125-19,350</td>
<td>16,125-17,750</td>
</tr>
<tr>
<td><strong>Coordinator</strong></td>
<td>16,125-19,350</td>
<td>16,125-17,750</td>
<td>14,775-16,125</td>
</tr>
<tr>
<td><strong>Senior Specialist</strong></td>
<td>12,900-19,350</td>
<td>12,900-19,350</td>
<td>12,900-19,350</td>
</tr>
<tr>
<td><strong>Specialist</strong></td>
<td>10,750-13,450</td>
<td>10,750-13,450</td>
<td>10,750-13,450</td>
</tr>
<tr>
<td><strong>Assistant</strong></td>
<td>8,600-10,750</td>
<td>8,600-10,750</td>
<td>8,600-10,750</td>
</tr>
<tr>
<td><strong>Aide (SG)</strong></td>
<td>6,000-8,600</td>
<td>6,000-8,600</td>
<td>6,000-8,600</td>
</tr>
</tbody>
</table>

**Top of salary range open to special justification for exceptional skills or experience**