A Systems Approach to Individualized Library Instruction.

California State Coll., Fullerton.

Jan 72

An independent study project for the Library School

Audiovisual Instruction; Community Colleges; Individual Instruction; Instructional Media; Junior College Libraries; Library Instruction; Library Skills; Multimedia Instruction; Teacher Developed Materials

Many attempts to utilize the media in library instruction involve presentations before large groups of students. This study, in contrast, proposes individualized media instruction based on an analysis of the library system. The sound-on-slide self-teaching instructional modules exemplified in the study cover pressure points of needed instruction in the library and provide consistently high quality instruction as needed by the library user on an individual basis. The study includes a thirty frame program for teaching periodical use in a college library. (This paper represents a follow-up of ED 054.765.) (Author)
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A SYSTEMS APPROACH TO INDIVIDUALIZED LIBRARY INSTRUCTION

by

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An Independent Study Project for the Library School

January, 1972
Abstract:

Many attempts to utilize the media in library instruction involve presentations before large groups of students. This study, in contrast, proposes individualized media instruction based on an analysis of the library system. The sound-on-slide self-teaching instructional modules exemplified in the study cover pressure points of needed instruction in the library and provide consistently high quality instruction as needed by the library user on an individual basis. The study includes a thirty frame program for teaching periodical use in a college library.
Two points of agreement occur within those articles which speak of library instruction: 1) hordes of students need to be taught to use the library, and 2) they are not being instructed in library use thoroughly, if at all. The chimera of those who want to teach use of the library seems to be "individual instruction"; the consensus seems to be that there is no possibility of achieving individual instruction as budgets are reduced and parent institutions demand increased efficiency of operation. Sheer size of incoming classes has proved the biggest challenge at all levels of higher education. Universities are turning away or rerouting applicants; state colleges are enrolling on a first-come-first-served basis; community colleges, maintaining an open-door enrollment policy, overflow with students preparing themselves for a berth in the larger institutions. It hardly seems a hopeful time for a return to individual attention for the library user in institutions of higher learning.

Yet a staple remark of articles written about library instruction during the 1960's confirms the librarian's interest in "teaching" the student to use the library and the necessity for the librarian to maintain "personal" contact with the student. While affirming the old values the same articles report the drastic reduction or elimination of formal library instruction and even that some libraries "content themselves with offering each student a library handbook and bidding him Godspeed." ¹

Surely, this solution represents an abandonment of the idea of "teaching" anything. In order to maintain the traditional contact of student and librarian in mutual pursuit of information, library instruction, which currently absorbs much of the time of the librarian at the service desk, must be innovatively and comprehensively restructured.

When innovation in library instruction has resulted from the pressure of large numbers of entering students, several patterns have emerged. The library tour seems sacrosanct; the fact that few students attend the tours only makes them easier to conduct. A more up-to-date approach to the library tour is to develop a media tour, that is a tour by means of film or television. This technique requires mass showings and therefore implies auditorium facilities. The media tour is most often used when a television or film production staff is available on the campus. The purpose of the film or videotape is usually inspirational rather than instructional, the two motifs being considered incompatible. "We decided to produce a film

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2An important and notable exception to this statement is A Programmed Textbook by Mary Louise Lyda and others, University of Colorado Libraries, Boulder, Colorado, 1970. It is well designed according to the principles of programmed instruction and informative as well as practical; its dreariness, however, emphasizes the need for an audio-visual stimulus in teaching this important but inevitably routine material. Not even the nude student on the cover mitigates the nature of the learning experience inside.

that would be largely inspirational and leave the how-to-do-it aspect to a more appropriate medium." Neither the traditional library tour nor the media tour actually teaches library use.

Ironically, the mass media seem to be relatively ineffective in capturing and keeping a mass audience for the library. Furthermore, the "more appropriate medium" often turns out to be the library lecture, held either in the library or in a classroom, and does not reach the mass audience but only selected classes. Another problem seems to attend this technique. When the librarian appears at the classroom door, selected reference books in hand, he brings with him a confusion in instructional goals. Although the librarian may be very effective in his presentation, the students may think that the "real" assignment does not require that the general principles of library research be learned. Some transfer of interest and information may occur, especially if the group is small and the librarian enthusiastic, but having the librarian into the classroom remains tokenism.

Not to disparage the very real cooperation that exists between some instructors and some librarians, still the librarian should accept and rise to the challenge of interpreting the library system to the students who need to use it and not rely on the faculty for invitation and occasion to instruct.

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Barbara Phipps in "Library Instruction for the Undergraduate" comments that the major reason for lack of success in library instruction is reported to be that library instruction is "nobody's baby," and that it is generally passed back and forth between the librarian and the English teacher.6

If it is the responsibility of the librarian to instruct and mass media techniques do not work effectively, then some innovative means to individual instruction should be pursued. Realistically, individual instruction at the average service desk in a college or university library is now nearly impossible. Furthermore, to repeat instructions on procedures to students who are not grounded in even a primitive understanding of how to get information out of the library system is not only ineffective, it is oppressive... even assuming the librarians can find the time and the heart to do that much instruction. Because of their current dual role of receptionist and purveyor of materials kept behind the desk, librarians barely have the time to indicate general directions and point.

The students of the 1970's represent their own paradox. They come with increased expectations and a sophistication born of exposure to the media that belies their naivete' in matters bibliographic. Various cultural backgrounds and degrees

of aggressiveness require that the librarian show great tact in even routine encounters with students. Some students, in addition, will not ask for help at all, even when they know they need it.

Complicated by minimum staffing and new trends toward independent study and a more flexible interpretation of degree qualifications to permit shortened academic residence and therefore more efficient use of educational facilities, the previous conditions add up to a crisis in the area of library instruction in colleges and universities and surely a crisis that deserves more than a piecemeal solution.

The characteristics of an adequate solution to the problem can be rigorously described. A solution must be systematic and total, that is, it must include all phases of the library operation. The presentation of the instruction must be individual and presented when the student needs and wants the instruction. The material presented should be practical, explicit, not condescending and readily available. The program must free the librarian to perform the creative tasks required by researching students by taking over the repetitive aspects of library use instruction that currently complicate the librarian's routine.

7A program which recognizes this concept and has built a successful course in library instruction is embodied in the document Chicano Library Program by Miriam Sue Dudley, UCLA Library Occasional Papers, Number 17, University of California Library, Los Angeles, 1970.
A system of self teaching audio-visual instructional modules programmed to provide procedural information\(^8\) for any student as he needs the information fulfills these requirements. Such a system would be a total system and encompass all pressure points within the library operation. Because of the programmed nature of the audio-visual system librarians would be released to deal with the concerns generated by the researching student. In short, creating a functioning instructional system will allow the librarian to relinquish the role of receptionist and take up the role of instructor and information mentor.

A proposal for such a system requires investigation of several major topics. First a realistic analysis of the library system from an information transaction point of view is necessary. In order to design an effective system, points of stress must be identified. Investigation of the necessary hardware is also necessary. The audio-visual capability of the institution figures prominently in the preparation of materials and servicing of the system. Finally, the principles of individualized instruction that will inform the program must be carefully identified.

\(^8\)By "procedural information" is meant a description of procedures which will allow the student to extract information from the library system in any form. It should be clear that such procedures might range in complexity from a description of where to sign a bookcard to a discussion of how an index displays the information it contains.
A complete analysis of the library system for the purposes of instruction should involve both an enumeration of the points at which the student interfaces with the library system and a description of the needs of the student. Although students vary as to the complexity of their information needs, all students need procedural information and a means to evaluate the collection against their purposes. A graduate student familiar with other libraries still seeks out procedural guides as he begins to use a collection new to him. The freshman differs only in that he may either wander, dazed, until he intuits some direction, or absorb such information as his peers have over coffee, an inefficient process at best. When the student is one of many who wander and the harassed librarian can only offer directional signals instead of library instruction, library service becomes highly inhumane. No matter what the background or situation of the student, he needs to use the library collection efficiently and he knows it.

The library typically offers eight stations at which the student performs an information transaction that requires him to know procedures. Two of those stations, the circulation desk and the card or book catalog, encompass the other six stations and relate to them as an indexing and control apparatus. Each of the other six stations represents a subcollection with its own
indexing system and, variously, control apparatus: the reserve collection, the reference collection, the periodicals collection, the documents collection, the music (recorded) collection and Special Collections. The general collection is not represented as an information transaction station per se because the card catalog and circulation desk represent entry into and removal from the collections and any procedures connected with the transaction are either merely physical on the part of the student, or accomplished by the library staff, as in the case of closed stacks. Some discussion of the location and organization of the main collection is implied by the nature of the circulation function, however, and should not be omitted.

An instructional system to encompass all of these stations, therefore, might require as many as eight modules. This would assume a very large library and extensive use, including as much use of Special Collections as, for example, the main card catalog. As such is obviously not the case in the average college or university library, it is likely that some fewer instructional modules would service the library system adequately.

A natural combination of related stations might produce the following operational modules: Circulation, including reserve circulation procedures and brief reference to all the various subcollections; Card Catalog, including a detailed discussion of research procedures; Periodicals and Documents, including reference to the major indexing systems involved in use of these materials; Reference. Thus, a system of some four instructional
modules could teach library procedures for the average college or university library and provide for more efficient employment of both the library and the professional staff.

The existence of such a system of software depends on the capacity of the hardware available to function smoothly and consistently in interface with the public and to maintain both audio and visual capability to provide for the teaching function. Teaching machines proposed for libraries have sometimes had flexibility but lacked durability. The sound-on-slide systems currently available provide both audio and visual programming capability, durability and simple operation including repeat capacity and student control, and sufficient portability to adapt to existing library facilities.

The sound-on-slide equipment operates as simply as any color slide projector. A recording surface is attached to a plastic frame that holds a 35 millimeter color slide. This arrangement provides for a grouping of individual audio-visual segments. Thus programmed concepts can be presented in an instructional sequence. An instructional module consisting of a box of slides and a set of earphones can be checked out from a desk to a student who takes the materials to a carrel and shows himself the series. The module might be controlled either by a librarian or by a clerk from an information desk with just a minimum description of the

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content and purpose of the materials. Appropriate advertisement would also prepare the library's public for using the system.

Costing such a mechanized system of library instruction must consider the humane aspects of the librarian's situation. To repeat again and again the rules for use of the card catalog costs not only professional time better invested, but drains morale reserves. To replace only a particular repetitive function with a filmstrip, perhaps, or a tape recording or teaching machine has proved both too expensive and ineffective. It may also result in repeated explanations by the librarian of how to run the machine. By providing a total system, more benefits for the initial cost are achieved, including the elimination of that repetition that wears down staff morale.

The Visual Products Division of 3M Company offers a Sound-on-Slide System that can serve as a guide for approximating costs. There are two machines for purchase. If reproduction capability is necessary, it will be if updating the presentation is anticipated, the projector-recorder serves as the basic machine at $795. (Model 1.5, 1971.) This unit should be reserved for the production of sound-on-slide materials as it allows recording and erasing sound. Within a college or university it may best remain within the Instructional Media Center from which place it may also be used by other disciplines on the campus.
The Projector, for use by the students, lists at $525. (Model 525F with speaker; dimensions 10x12x12".) The Projector uses a lamp which lists for $4.60 and requires replacement twice a year with hard use. Maintenance on the machine runs-to very little and can generally be handled by the instructional media staff.

The trays for use with the projector list at $42. and include the plastic frames with eraseable magnetic tape recording capacity. Slides for the program provide an additional cost. It should be noted that slides in the series may be replaced individually -- the sequence can be updated with no major reinvestment.

Once the student has opted for the instruction, he controls the length of time spent looking at the slides. The modules consist of thirty-six half minute segments that will run an average of twelve minutes per module. The student may choose to run quickly through certain sections of the program and repeat others. The sound-on-slide machine provides no time limit on the viewing of any slide. The student who needs to repeat any sound segment simply pushes a repeat button. Instructions to this effect are programmed into each module. Because of the nature of the machinery and the privacy of the instruction, it is likely that a student will complete the sequence once he has begun, thus assuring more concentrated attention to procedures than is accomplished during traditional library orientations or even library exercises assigned through required classes.
Some problems may arise from superimposing a set of instructional devices onto an already crowded library facility. Advantages, however, also accrue from the nature of the instruction. The library lecture requires a classroom, preferably within the library facility. Such classrooms, when available, have tended to be conference rooms intended for small groups. Again the numbers that should be involved in library instruction have long since outstripped such conference rooms as are available. The alternative — to turn the Reference .. into a lecture hall — violates both the acoustics and the intended function of that facility.

The sound-on-slide machine, in contrast, requires only the space of two ordinary study carrels and no scheduling of appointments. In fact, a quiet corner, with which libraries seem to abound, and an available table top, provide a very adequate instructional station. Because the student uses the program with a set of earphones, no disturbance of research and study activities need be anticipated. The program can be located at a centrally accessible place in the library or spotted throughout the facility near the station it discusses as circumstances and budget dictate.

The advantages that accrue from the nature and flexibility of the hardware are not, however, the dominant improvement over the old methods. The real-pay off comes because of the principles
of individualized instruction used, that is, the content of the software. It is important to emphasize that the technique of individual instruction with the sound-on-slide modules makes possible again a contact that was once assumed with less crowded conditions when a teacher-librarian could relate in a one-to-one ratio with the student.

The modules provide for individual instruction. The program is addressed directly to the student and his need for efficient use of the library. Once the student operates the module, he is shut off from the rest of the library (he is wearing earphones) and can absorb a private experience with concentration much as he might absorb music through stereophonic earphones while driving a car along a freeway; such are the children of the media.

Note also that as the student's desire to learn about the library has obliged him to seek out the course, the program begins with the student "where he is."

A second principle operates here: the instruction is available when the student is motivated to use it, not just at the beginning of the term or during an "orientation week." Students often have heavy introductory reading to begin a term and no heart for tackling the periodicals collection for material for a term paper, for example, although they may need to absorb general library policies and learn the reserve system procedures immediately. Once the total instructional system is operative, the student may approach each station as he has reason to use it.
By collapsing the time between the instruction and the use of the principles taught, motivation is heightened. In turn, the student's motivation should increase the efficiency with which he learns to use the library.

Although library instruction seems to benefit from association with class-centered work, group library instruction and orientation programs have suffered high drop-out rates, apparently because the "grading" of such a course has no connection with the academic record of the student; the librarian cannot "threaten" and the student knows it. Independence from this dubious advantage is another positive aspect of the module system. Because the system is independent of any artificial "test" of performance, the library instruction can be associated with help and success rather than judgment and failure.

The concept of failure has additional importance. Although reference questions do not seem to imply student inferiority, many librarians are now aware of the fact that some failure is implied when a student finally has to ask how to use a service of the library. Librarians are hard pressed to overcome this problem; some unsuspected judgment may be implied in the kindest of responses. The modules system avoids this problem because it is utilitarian, not judgmental -- and the student is helping himself. Thus the planned learning sequence offers an additional advantage for the library which interfaces with numbers of students from other than middle class backgrounds. Because the student is helping himself, the program promotes independence and self-reliance rather than a dependence on library personnel, a dependence that
may be humiliating in the terms of the student cultural background.

The basic technique for presenting information within the instructional system is to reinforce a visual image with audio description; the student not only sees but hears the material. This reinforcement is echoed in the general scheme of presenting principles and buttressing them with examples. The principle that most periodical materials are shelved by call number is supported by an example of a periodical title card which gives the call number, for example. The visual pictures the card; the audio reinforces the principle by description.

The combination of audio and visual capacity with sound-on-slide systems also provides an opportunity for simulation of the procedure as well as a description of it. The visual component of a segment can present material while the audio, instead of merely reinforcing the visual with description, can play against the visual, asking questions that elicit student responses based on thinking through procedures he has been taught — in short, simulating the process he will use as he researches on his own.

Because the planned learning sequence always proceeds from the general to the particular, each bit of information taught is seen in context. Indexes provide an illustration. The student does not learn about a particular index until he learns where indexes are located and what bibliographic lists help
him to locate the ones which will interest him. Then there is
a listing of subjects covered, and only after these three steps
are accomplished, a simulation with a particular index. Each
module is organized similarly. All begin with a brief general
discussion of information retrieval and show the student how
he relates to the library before the particular concerns of
that module are discussed. It is not enough to teach a pro-
cedure to a student if he does not realize how, when and where
that procedure can be used.

The following series of instructional frames form one
module entitled

A SHORT COURSE IN METHODS OF LIBRARY RESEARCH

PERIODICALS DOCUMENTS NEWSPAPERS
Frame Number One

Audio: The goal of this short course in methods of library research is to identify the kinds of information available to you here in the library and show how to locate the information you want most efficiently. The course assumes that you have a job to do and want to do it as quickly as possible.

You control the presentation. If you have seen enough of a slide, advance to the next one. If you want to hear the material again, push the sound repeat button.

Change the slide if you are ready.

Visual: A picture of the 3M Projector used in the program is centered on the slide with the following title centered beneath it:

A SHORT COURSE IN METHODS OF LIBRARY RESEARCH
PERIODICALS DOCUMENTS AND NEWSPAPERS
Audio: Now that you can use the machine, let's mention some characteristics that you and the library have that may not have occurred to you.

Both you and the library are highly organized. However, you are organized to accomplish goals by bringing materials together; the library is organized to store, and allow you to retrieve, information by breaking knowledge into separate categories.

Some students run into problems when they use the library because their system of procedure is different from the system of the library.

If you want to hear that again, push the repeat button; if not, go on to the next slide.

Visual: The following diagram illustrates the difference between goal orientation and storage orientation.
Audio: For example, let's say you have a term paper to write for a class. Naturally, you are thinking about the subject of the paper when you come into the library. But in order to use the library you have to decide what information you need and then figure out where that information is in the library system.

The only efficient way into the library information system is through card catalogs and other indexes.

WANDERING THROUGH THE STACKS WASTES TIME!

Visual: An actual scene or an illustration portrays a student, perplexed, wandering through the stack area of the periodical stacks. The above mentioned slogan may be superimposed on the slide.
Audio: This slide lists what you will learn in this course; the entire course takes twelve minutes.

This course is not concerned with books but instead with another category of library materials -- materials published periodically -- documents, periodicals and newspapers.

If you already know some of the material that will be covered in this course you may wish to skim quickly over some of the section. By completing the course, you will see and hear a complete survey of how to use the periodical materials available in the library.

Re-read the list before you go on to the next slide.

Visual: The following table gives the content of the course:

You will learn:

1. Location of Documents, Periodicals, and Newspapers
2. Use of Periodical Card Catalog
3. Use of Indexes and Abstracts
4. How to research a subject for a paper.
Audio: This area contains materials which are published periodically, that is, government publications, periodicals and newspapers. You may want these materials for current information or for information published at a certain time in the past, during World War II, for example, or just before the Crash of 1939. Also, you may need up to date scholarly material.

The chart of the area shows that materials here are located by type, that is, government documents are together, periodicals are together and newspapers are together.

Study the location of the materials. See any problems?

Visual: The following chart gives the relative locations of the various materials included in the periodicals area.
Frame Number Six

Audio: You may have noticed that microforms are an exception to the arrangement by type of material. All three types of materials may be found in microfilm or microcard. These forms of materials require machines for use. The machines are located in the Microfilm Reading Room.

Microcard or microfiche materials are kept at the Reference Desk. Microfilms are again organized by type of material as you can see in the chart. Government publications on microfilm are located in a separate cabinet. The range of materials available in microform is an advantage that far outweighs the minor inconvenience of using a machine to read the articles. Your Library Handbook also discusses this form of information storage.

Visual: The chart of the area is repeated with the microform materials area outlined in red to show where the microform materials are located in relation to the other types of material.
Audio: Notice the sections marked Newspapers and Uncataloged Periodicals. These materials represent another exception: they are arranged alphabetically by title. You may find it advantageous just to browse through this small collection for material on your topic.

Now that you know the exception, here is the rule: All other materials including microfilm are arranged by a call number.

The reason the rule is important is this: if you don't have that number you don't have the key to the location of the material you want.

Visual: The chart of the area is repeated, this time with the area of the Newspapers and Uncataloged Periodicals in a red box. The following slogan may be superimposed toward the bottom of the chart:

IF YOU DON'T HAVE THE CALL NUMBER --
YOU CAN'T FIND THE MATERIAL.
Frame Number Eight

Audio: Government Publications, commonly called Documents, are cataloged by a separate system of numbers assigned by the Superintendent of Documents, known familiarly as Sup Doc. In order to find a document number, look in the Government Documents Checklist near the Periodicals Card Catalog.

The major index of government publications is the Monthly Catalog. Many students do not know to use government publications, or do not know how to find specific articles containing the kind of information they need.

One example that illustrates the kind of information available in Government Publications is the subject of Urban Planning and Development.

Visual: A slide of students using the Government Documents Checklist shows its relationship to the Periodicals Card Catalog.
Audio: Many bibliographies on Urban Planning and Community Development have been published by government agencies since 1960.

Studies of Legislation relating to cities are published by Commissions and by the Congress.

In addition HUD (Department of United States Housing and Urban Development) publishes articles covering:

- Low Cost Housing
- Model Cities Management
- Urban Transportation
- Urban Renewal

Publications on Urban Planning cover a wide range of topics from local programs for community improvement to the preserving of historic sites and avoidance of overhead utilities.

Visual: A listing of examples of documents published by the government under the various headings shows the spread of information available.
Audio: The arrangement of periodicals is also by number: the familiar Library of Congress number. The only way you can find a periodical quickly for the first time is to look up the call number in the Periodical Card Catalog. The periodicals are not arranged alphabetically; you must have the Library of Congress number whether the periodical is bound, unbound or on microfilm.

The next section shows you how to use the Periodical Card Catalog to identify the LC number and use the periodical collection.

Visual: A picture of a student at the Periodical Card Catalog sets the stage for the following detailed consideration of how to use the card catalog.
Frame Number Eleven

Audio: Remember, you consult the Periodical Card Catalog because you don't have a choice. The Card Catalog gives you the call number of the periodical -- its location on the shelves.

While you have the drawer open, there are several things you can learn which may save you time. To learn these things you must use both the Title Card and the Holdings Card.

Visual: Reproductions of both a Title Card and a Holdings Card illustrate the format of the two kinds of cards.
Audio: The Title Card comes first in the drawer and tells you three major things:

1) the full title and subtitle
2) the call number of the periodical
3) the history of the periodical, including any name changes that may have occurred.

Write down at least the call number for reference.

This is also a good time to write down complete bibliographic information for your footnotes.

But this is still not enough information to save you from a wild goose chase. For more information, consult the Holdings Card.

Visual: A reproduction of a Title Card with the areas discussed marked with numbers ties the audio comment to an example.
Frame Number Thirteen

Audio: The Holdings Card tells you two significant things:

1) whether the volume you need is in the collection;
2) where the item is located on the shelves.

Each volume and year in the collection is listed. "Inc" stands for Incomplete, indicating that the library does not have all numbers in the volume or volumes in the year.

The location is noted by one of four code letters. Bound and Unbound periodicals are in the stacks. Microfilm is in the cabinets. Microcards are kept at the Reference Desk.

Visual: A reproduction of a Holdings Card with the items discussed marked with numbers ties the audio comment with an example.
Audio: These two cards represent the catalog entry for one journal in the area of language and literature. Notice the information you can retrieve from the cards.

1) Full title of the periodical
2) Call number
3) Publishing information
4) A list of volumes in the collection
5) Location of the volumes

The "to date" below Volume Five means that the library still subscribes to the periodical and is receiving current issues.

Now try the next set of cards yourself.

Visual: A reproduction of a Title Card and a Holdings Card allows the viewer to read the entry while it is being described. Numbers written on the cards guide the viewer's eye.
Audio: Notice how much information you can get from these two cards:

Where was this weekly published?
Which volumes are bound?
When did the library switch to microfilm copies?
Which term on the card has not yet been discussed?

Special Collections isolates material that needs to be carefully handled for various reasons. The term is included here to keep you from getting overconfident. Ask any librarian about Special Collections or consult your Library Handbook.

The next section of the course deals with Indexes to Periodicals.

Visual: The viewer sees reproductions of a Title Card and a Holdings Card on the basis of which a search of the entry for information is simulated.
Audio: Let's assume that you have come to the Periodicals section of the library for a certain kind of information — up to date information about welfare reform in California, for example. Your problem is that you don't know what periodical to look up.

The most efficient way to find a periodical that covers your subject is to use one of the Indexes near the Reference Desk. However, before you can use an index you have to identify one that covers your subject.

Remember the basic principle:

WANDERING THROUGH THE STACKS WASTES TIME!

Visual: A slide view of the Indexes and Abstracts area locates the student in the library.
Audio: Here's the device that will save you the most time. This Bibliography of Periodical Indexes lists all the Indexes and Abstracts available for you. It is much easier to find what is available in your subject area by reading this Bibliography than by browsing in the Indexes section of the Stacks or by trying to find indexes you already know.

Visual: A reproduction of the Bibliography of Indexes and Abstracting Services available from the Reference Desk fills the screen.
Audio: There are several kinds of Indexes available in the Bibliography of Periodical Indexes available at the Periodicals Reference Desk.

General Indexes include materials from a broad field of knowledge. The most well known may be the Reader's Guide to Periodical Literature.

Newspaper Indexes are few but may be important to you. Some newspapers indexed are:

- The Christian Science Monitor
- The Los Angeles Times
- The New York Times
- The London Times
- The Wall Street Journal

Subject Indexes, the largest group, are discussed on the next slide.

Visual: A diagram illustrates the three types of indexes.
Audio: The chart you see lists the main subject divisions for periodical indexes. Each division you see lists from one to five indexes you might consult. Don't try to read the list now; just think about all the work that has been done so you can get the information you need.

Now take your time and read the list. What subject area would you check to find information about the welfare system topic that was mentioned previously?

Visual: A chart lists subjects indexed in the Bibliography.
Frame Number Twenty

Audio: If you selected the subject area Sociology you would have found these three indexes listed in the Bibliography. Which index would you check for articles on welfare?

Sociological Abstracts, 1970, lists and describes seven articles on welfare; four or five of them seem to apply to the situation in California. The articles are listed in the subject index of the 1970 volume under Welfare.

Once you have selected the articles, and written down the names of the periodical, you are ready to refer to other indexes; perhaps a newspaper index would also give you very current information.

Visual: The three abstracting services listed in the Bibliography are listed with their Library of Congress numbers.
Frame Number Twenty-one

Audio: Review what happens in the search for information on welfare reform in California:

1) In order to find specific indexes -- check the Bibliography of Periodical Indexes.

2) Locate the indexes you want in the Indexes and Abstracts section -- by call number.

3) Check for articles you need in the subject index of the volume you are using.

4) Read the brief description of the article (also called the Abstract) to see if it applies to the topic.

5) Write down the bibliographic information you need to find the periodical.

Visual: A flow chart indicates the procedures mentioned above.
Audio: You have now been through the simple steps of the research process; the only thing left to do is to turn the procedure around and make it work.

By now we can assume that you realize two things. The first is that the Periodical collection is like a miniature library complete with Reference works (the Indexes), a Card Catalog (the Periodical Card Catalog) and a Collection arranged on the shelves by call number.

Visual: A chart compares the main library with the periodical collection in terms of the points mentioned above.
Audio: The second thing you should know for efficient research is what information you need.

Let's look at that for a second. If you are researching, you already have a topic or at least a general subject. Based on your topic, you will know what kind of information you need. You may want to find a specific periodical or you may want to find articles on a specific subject.

This chart represents the major steps you must go through to locate your information in the periodical collection.

Visual: A flow chart pictures the major steps mentioned.
Audio: The simplest routine to follow is finding a periodical when you know its correct title. Only four steps are required:

1) Search the Periodical Card Catalog for the title of the periodical;
2) Check the Holdings Card for volume number;
3) Write down call number and bibliographic information.
4) Locate periodical on shelf by call number.

Visual: A flow chart pictures the four steps discussed.
Audio: If you don't know the title of the periodical you want so that you can go directly to the periodical card catalog, the routine you will follow will be a little longer. First refer to the *Bibliography of Periodical Indexes* for a list of the indexes available on your subject, then follow the familiar routine given above.

Now if the world were perfect and all libraries were complete, you would have no trouble finding any periodical you wanted with this method.

Visual: A flow chart pictures the six steps discussed.
Frame Number Twenty-six

Audio: But the world is not perfect and no library has all the resources possible. What happens when you find that some material that you need is not in the library collection?

Here are two suggestions:

1) Let the librarian know. If there is a consistent demand for the material, he may want to order what you need.

2) Go back to the Bibliography and check for a Union List of periodicals in a university or public library in your area. Some library has the material you need; find that library and go get it.

Visual: A decision segment from a flow chart illustrates the two alternatives discussed.
Audio: Now if you are not fed up already, let's briefly simulate the beginning of a research project.

Assume that this is your topic on the screen. What kind of information do you need that you could find in the periodicals section of the library?

Although you might not need current information from popular magazines, or even general interest magazines indexed by the Reader's Guide to Periodical Literature, you could use scholarly articles on Herman Melville and his work.

The next slide gives you the Bibliography listing for English:

Visual: The topic "The Personification of Moral Dilemma in the Novels of Herman Melville" fills the screen.
Audio: Which of the indexes shown would you choose to consult to find information on the Melville topic?

Abstracts of English Studies summarizes articles about authors and groups abstracts about an author together. It will provide you with a quick survey of the scholarship on Melville for any year.

The MLA Annual Bibliography is the most comprehensive list of articles and books available in the English field.

Once you have a lead on an article, locate the periodical you need through the Periodical Card Catalog.

Visual: A reproduction of a page from the Bibliography lists all the indexes and abstracts given under English so the student can see all the choices available to him.
Audio: Even if you find only one article in an index, follow through and find that article in the collection. Very often one article will refer to others in footnotes or in a bibliography.

After finding just one article in a journal, you may find yourself back at the Periodical Card Catalog with several references to particular periodicals.

Chance figures in the research process, but most good breaks are the result of basically good research procedures.

Visual: An illustration or photograph of students crowding around the card catalog may carry the proper mood for this commentary.
Frame Number Thirty

Audio: The content of the course is applicable to any project involving periodicals materials. The research techniques discussed here come from an analysis of the experiences of many successful students and the observations of many librarians.

But though the techniques are universal, the material for each project is unique and each project may turn up unique problems. Once you get into your project be sure to discuss specific information problems with the information specialist at the reference desk.

Good luck with your research -- and don't forget the basic principle:

WANDERING THROUGH THE STICKS WASTES TIME!

Visual: A closing picture of students at conference with a librarian would set the proper impression with the farewell encouragement.