

UNIVERSITY BIBLIOGRAPHIC INSTRUCTION ELEMENTS IN DESIGN

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Abstract

This article is designed for reference librarians who are seeking ways to improve bibliographic instruction at the university level. Important ingredients for successful bibliographic instruction programs are given. The responsibilities of a successful partnership between faculty, reference librarians, and students is discussed. Specific instructional design components with reflective questioning about teaching effectiveness is included. Appendix A is a sample bibliographic student assignment and Appendix B includes a reference librarian curriculum self-assessment instrument.

I've been teaching bibliographic instruction courses for years, but never have felt I was planning my instruction with sufficient attention to detail. How can I do a better job?

I can never seem to get the faculty to understand my role as an instructional leader to assist their students with course assignments.

How can I incorporate new strategies to enhance my instruction including the use of technology.

Most instructional design is similar to the process of scientific inquiry. A problem is identified, a hypothesis for the solution is formulated, experiments are conducted, and data are gathered that lead to a conclusion about the suitability of the problem. If it is proven to be correct, the results are used to implement the curricu-

lum. This sounds easy. What could be so difficult about the design of bibliographic instruction? In fact, "What could be more straightforward than teaching the card catalog or How to analyze an index?" As simple as it may seem at a glance, the task is **not** easy. This article will relate all elements of the instructional process in building a successful program for bibliographic instruction at the university level. The partnership of the faculty, reference librarians, and students will be discussed. Additionally, specific instructional design strategies will be given including the use of technology.

Partnership for Success

Academic departments and the library personal must work together to ensure student success in a university setting. A successful partnership is dependent on the relationship among the faculty, reference librarians, and students. Each play an important part in the development of a partnership.

Faculty's Role in Partnership

The best instructional design in the world would not ensure a lasting impact on the students without the understanding, acceptance, and advocacy of the faculty. Faculty must be convinced that "librarianship" is a real discipline. The faculty's role often exist around the course related structure. It becomes the responsibility of the faculty to communicate course objectives to the reference librarian and the related assignments given to the students to complete. The faculty are generally wanting the reference departments to provide a service so that the students know how to access, collect, and apply research for the completion of assignments. Collaborative meetings between faculty and the reference department, with a specific agenda are essential to ensure effective communication. Libraries have been a part of the faculties lives since the early days but, faculty must not abuse the service provided to them by

the reference departments. The truth is, there is a lot about the library that faculty don't know or should be expected to know. But, abuse to the service provided to faculty can inhibit effective instructional design. The following vignettes are examples of how faculty may abuse the service provided to them by reference departments :

A part-time instructor who requested a library session arrived ten minutes late with his class, waves his hand and says : "O.K. Tell them what they need to know but don't use any more than 20 minutes of time. I have more important information to share when you are done."

An Assistant Professor called one Friday morning and demanded a class for 8 : 00 a.m. the following Monday. When informed that more lead time was needed, she complained, "My department chairman told me I could just send my class to the library."

"The problem is not so much the best way to teach students to use the library, it is rather to change the attitudes of the faculty toward the library....." (Mellon, 1982, p.78) If surveyed, professors would give lip service to the importance of the library in the education of the student, but few would be aware of the need to work with a professional librarian in redesigning their courses to include an effective library component. If an adversarial relationship exists between the faculty and reference librarians, the first step for improvement may be to change. The change theory model proposed by Havlock, 1973, is insightful regarding the relationship between the agent (reference librarian) and his client (faculty). His stages can be summarized as follows :

1. **Building a relationship.** A successful relationship between the agent and his clients, the people he is trying to help, is the key to successful planned change. This depends heavily upon the change agent's personality and skill and how clearly he or she has come to know the client.
2. **Gaining acceptance.** It is the job of the change agent to convince the people he is trying to help to accept the educational innovation. The activities of the change agent at this stage include promoting awareness of the innovation, explaining, demonstrating and training people in its' application to the situation and integrating the innovation into day-to-day use.

3. **Stabilizing the innovation and generating self-renewal.** The relevant activities from this stage are internalizing the innovation to insure long term continuation and building competence within the client system to continue the use of the innovation.

The first consideration should be building the relationship or partnership. Once the relationship is formed a systematic communicative protocol must be maintained. This may mean joint meetings between faculty and reference librarians. By communicating unclouded expectations through effective communication problems can be prevented like the ones pointed out in the vignettes above.

Student Considerations in Instructional Design

The **student's role** is vital to the success of a course or an instructional unit. Who are they? What do they currently know about the library? Instructional design may fail because the needs of the students were not considered. According to Boone (1982), there are three general types of motivational problems associated with students relevant to bibliographic instruction. The first two types of motivational problems embody the extent to which the learner perceives the instruction to be relevant and interesting (value terms) and possible (expectancy terms). The third type concerns how to avoid negative evaluation regarding instruction. Boone states :

.....In order to motivate learners their curiosity must be aroused in combination with their perception of relevancy to their personal goals, and they must perceive that the success in learning is possible within the context of outcomes of the learning experience being consistent with their own reasons for learning. (p. 39)

False assumptions about students knowledge of the library can be prevented by an assessment worksheet. Collaborative discussions regarding the design of this worksheet could be a topic for the agenda at faculty/reference librarian meetings. The completion of the worksheet which gathers data regarding the problems encountered with the library would help answer the usual questions asked by students and would serve to explain procedural information needed by student's when completing research. The reference departments

who want to assist students with the location of resource materials should prepare the worksheet for students. The worksheet would be similar to a "scavenger hunt" asking procedural questions: "On what floor are found the bound periodicals?" "What's a style manual?" "How do I find journal articles for a research paper?" The worksheets would be prepared to match each field of study that requires bibliographic instruction. The student who is from education, business, or engineering would complete their respective worksheets. The worksheets completed prior to the bibliographic instruction class would serve to motivate the learner and would address any problems encountered by the student's that could be answered during bibliographic instruction by the reference librarian. The instructor from the respective field of study would include the library worksheet as a part of the requirements for their course. This is important to ensure to the student that the information about the library is tied to their success in a course. (A Sample worksheet is provided in Appendix A.)

Remember, the factors regarding the student's role in planning effective instruction, include the consideration of the students motivation and knowledge. Now that we have examined the role of the faculty and the student, let's examine the role of the reference librarian.

Reference Librarian Roles

Articles by Heinich 1970, Grazier 1976, Cleaver and Taylor 1989, address the changing role of the reference librarians working universities today. In fact, several titles are given to these individuals: librarian, media specialists, instructional consultant, curriculum developer, teacher, and reference librarian. This is not an exhaustive list of all possible titles that exist for library "type" individuals. None the less, with all the possible titles given to these individuals, and with all the differences that exist between and among libraries, it becomes difficult to clarify their role. For the

purpose of this article, the role played by the library specialist will be in relation to their job as a curriculum developer and instructional designer. I will choose the title "reference librarian" to describe this persons role within the university.

First and foremost, the role must be proactive. The reference librarians point of entry must be during the planning phase of instruction. The reference librarian is in a position to identify materials both within the university and from sources outside the university, retrieve pertinent findings on the content being proposed, recommend learning experiences and instructional strategies, know what skills students will need when using the library as part of the planned instruction. Additionally, the reference librarian's role will be an integrated part of the curriculum plan rather than an after thought or supplement. It has been suggested that a systematic schedule of meetings with faculty and department chairmen are necessary to facilitate this goal.

Before providing a systematic sample of bibliographic instruction it is important to note that the design of library instruction does not have the same place in the academic curriculum as other college instruction. Reference librarians who design and deliver instruction have, for the most part, no control over its placement within the course for which it is requested nor the amount of time allotted to it. According to Mellon (1982), the following contrast exist between regular college instruction and library instruction.

Regular college instruction has curriculum legitimacy ; it exists as courses within academic departments. Library instruction, for the most part, is peripheral to the curriculum, existing as a service at the request of the teaching faculty. Second, regular college instruction involves primary student contact ; the students have enrolled in these courses. Library instruction is secondary student contact ; the students are not 'our' students. Third, regular college instruction involves continuing student contact over a period of a semester or a quarter. Library instruction is usually a single session experience. Fourth, regular college instruction implies control of the reward system ; the professor decides how and for what students will be graded. Library instruction usually has no direct relationship to the grade.

Up to this point, important program considerations have been mentioned about the partnership that must exist between faculty, students, and reference librarians in bibliographic design. In this next section, instructional design considerations will be provided.

Elements in Instructional Design

The key elements that seem to appear in almost any instructional design process include : characteristics of the learners, objectives, teaching and learning methods, and the evaluation procedure. These elements are interrelated and could conceivably comprise an entire instructional design plan. However, when combined and integrated with the basic four components, they form a complete instructional design. The following seven elements should receive attention in a comprehensive instructional design plan :

1. Assess learning needs for designing the instruction : state goals, constraints, and priorities that must be recognized.

The first consideration is always the learner. Think about whether the students are from a particular major, engineering, education, health occupation, liberal arts, or business. Which data bases are you wanting to display for this audience? During the planning of your presentation, consider these questions : What do I expect students to know and be able to do as a result of the lesson? What can I assume that students already know in order to achieve the goal that I have chosen?

2. Select topics or job tasks to be treated and indicate purposes to be served.

Remember that in a formal lecture to any group of students or adults a good rule of thumb is : Tell them what you are going to tell them, tell them, and then tell them what you have told them. (Esler, Sciortino, 1991) This means be specific at the beginning of your lesson and state the learning task or outcome. Ask yourself these readiness questions : Was background information given? Was the goal of the lesson communicated to the students? Was a purpose

established for completing the lesson? Were the materials ready and accessible? Was the lesson started promptly?

3. Examine characteristics of learners which should receive attention during planning.

It has been suggested that previous to the bibliographic instruction you administer a survey or worksheet that can be completed by the learner. As was described earlier, the purpose is to allow the students to work through the completion of a task related to a topic under investigation. If the students have had an opportunity to complete the worksheet prior to instruction, then they know on what floor materials can be found, the libraries hours of operation, and other pertinent procedural information.

4. Identify subject content and analyze task components relating to stated goals and purposes.

If planning meetings have been established between the reference librarians and department faculty, then the subject content will have been discussed. More importantly, what types of reflective questioning can be asked of your particular design at this phase. Ask yourself the following: What type of techniques will I use to teach this lesson (demonstration, explanation, discussion, cooperative grouping, question and answer, video, CD-ROM, etc.). Tell the students how you plan to get the objectives across.

5. Design teaching/learning activities to accomplish the stated objectives.

Some suggestions for your actual presentation include: You should begin with a concise statement to preview the lecture. Present an outline, use chalkboard, overhead, or a handout as a guide through your presentation. Limit one-way communication to 20 minutes. Even adult learners have limited attention spans. After providing 20 minutes of a presentation, vary the format to a discussion or a group activity or to questions about what has been said. In other words, use a variety of materials and activities to meet the stated objectives and goals. Pause, give listeners thinking

time and include concrete ideas because they are remembered more easily. Talk, do not read. Vary your voice, gestures, position, pace etc. Use relevant examples to students, their previous learning, experiences, or "real life." Use humor and be brief.

6. Select resources and support services required for developing and implementing activities and acquiring or producing materials.

Instructional design will vary depending upon the resources available to you. If your library is automated with computer terminals, then you may also have access to databases on CD-ROM. One of the most important applications for CD-ROM is the storage of large databases. Prior to CD-ROM, databases were usually stored in huge indexes in libraries or on mainframe computers. Computers and modems could be used to access the mainframe computers. The expense was high and many universities did not have the necessary equipment or telephone lines. Some libraries today have indexes available on CD-ROM. These indexes may not have the full text of the article. Instead, they provide the author, title, year of publication, journal, an abstract, and so on. The user can read the abstract or save the information to a diskette. Although a student must often physically locate the referenced article in a journal, CD-ROM databases are invaluable because of the time they save in searching for relevant information. According to Barron and Orwig 1993, the following CD-ROM indexes are used to facilitate the retrieval of large quantities of information. To facilitate acquisition of the referenced text in databases, some indexes, such as **TOM** (text on Microfiche) by Information Access Company, provide microfiche copies of articles that are referenced in the CD-ROM index. Additional examples of CD-ROM may be the Education Resources Information Center (**ERIC**) which is a national bibliographic database for educational literature. ERIC currently references over 775 professional journals and 300,000 documents from other sources, such as conference papers and research studies. The information in ERIC is acquired from

a nationwide network of 16 clearinghouses. Other examples of databases for education on CD-ROM include **Periodical Abstracts** by University Microfilms International. This database provides citations and abstracts to articles in over 300 general and reference periodicals in the areas of arts, business, science and computers, health, news, lifestyles, commentary, education, literary and political reviews, consumers, and social issues. Another CD-ROM that can provide timely information about a variety of issues is called **SIRS** (Social Issues Resources Series). This database is made up of articles from newspapers, magazines, government publications, and journals. (Barron and Orwig, 1993) You may not have this technology available to you for your instructional design. However, other support services for the production of posters, overhead transparencies, books and reference material are all important considerations in relation to your overall design.

7. Prepare to evaluate learning and outcomes of the lesson.

Evaluation whether informal (follow-up phone call back to the department) or a formal evaluation (student's completing written response) is important to the design of effective bibliographic instruction. If you want to really improve upon your instructional effectiveness, then the formal evaluation of your lesson completed by the students may be more beneficial to you. To evaluate your teaching, you may want to consider the following questions: Was the explanation of the lesson goal understandable to the students? Were sufficient examples and illustrations given? Were teaching materials adapted to the students' needs? Were occasional summaries of key points provided? Were all students involved with the lesson? Were task-related comments and questions used? Did the students learn the intended goal? Did the students seem satisfied with the lesson? Was the time too long or too short? In retrospect, what would I have done differently?

Conclusion

This article has highlighted some important considerations for bibliographic instruction at the university level. However, the design elements do not constitute a comprehensive list or plan. Years of experience with bibliographic instruction does not ensure a successful program. Modification is always beneficial due to technology or personnel changes. Improvements needed in instructional design are dependent on periodic reflective analysis.

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Appendix A

This worksheet was developed by Phyllis J. Hudson. A University Librarian

from the Reference Department at the University of Central Florida, Orlando, Florida.

SELF-GUIDED TOUR OF
THE UCF LIBRARY FOR STUDENTS IN THE COLLEGE OF EDUCATION :
ANSWER KEY

Student Name _____ Class Name/no _____ Day/time _____

Your "ASSIGNED SUBJECT" is : READING

EXERCISE I : The Library Catalog in LUIS

TYPE : "MENU", PRESS Enter. TYPE '5', PRESS Enter. YOU ARE NOW IN THE UCF LIBRARY CATALOG.

1. Exactly what would you type to find books on your "assigned subject"? (Include any symbols)

1. S=reading

Type the answer to #1. Press Enter.

Type "1" and press Enter. Find the line number with the following entry :

ACCOUNTABILITY AND READING INSTRUCTION CRITI.....

Type the line number for that entry. Press Enter. From the information that appears, answer the following :

- | | |
|---|---|
| 2. What is the author's name? | 2. <u>Robert B. Ruddell</u> |
| 3. What is the full title of the book? | 3. <u>Accountability and Reading Instruction : Critical Issues.</u> |
| 4. What is the publication (or copyright) date? | 4. <u>1973</u> |
| 5. What is the call number and location? | 5. <u>LB 2806. R83 General Collection</u> |
| 6. Type "e", press <u>Enter</u> . Now, search by the first three or four words of the book title (see answer #3, above). What exactly did you type to retrieve the entry by title? (Include any symbols). | 6. <u>T=accountability and reading</u> |

GO BACK TO THE SELF-GUIDED TOUR AND CONTINUE.....

EXERCISE II : *Education Index*

Look up your "assigned subject" READING in one of the bound volumes of *Education Index* located on Index Table 2. (If you are directed to "see" another subject heading, look under that heading).

7. What heading is used in *Education Index* for your "assigned subject"?

7. Reading

Questions 8-9 are based on the following sample entry from *Education Index* :

ARTISTIC ABILITY

Words and pictures : the relationship between graphic and verbal expression of young children. J. A. Rubin and H. Rubin. bibl il Am J Art Ther 26 : 71-82 F '88

8. What is the abbreviation of the periodical containing the article?



8. Am J Art Ther

9. Look in the front of the *Education Index* volume for a section entitled: "Abbreviations of Periodicals Indexed." What is the full title of the periodical in answer #8.

9. American Journal of Art Theory

EXERCISE III : Locating periodicals in the UCF Library

10. Go to a LUIS terminal. Type "menu", press Enter. Type "5", press Enter. Type "tj=" followed by the journal title in answer #9, press Enter. Type "HO", press Enter to see the "Holdings Detail" Screen. What volumes of this journal are in the UCF Library?

10. v. 9-28 (+ current issues)

11. Are any of the volumes of this journal on microfilm? (If yes, indicate which volumes.)

11. Yes, v. 9-13

12. What is the call number for this periodical?

12. RC 489. A7 B82

LOOK AT THE "UCF LIBRARY LOCATIONS" CHART ON THE LAST PAGE OF THE GUIDE.

13. On which floor of the UCF Library are the bound volumes of this journal located?

13. 4th floor

14. On which floor are the current issues located? 14. 3rd floor

EXERCISE IV : Educational Resources Information Center (ERIC)

15. Find the entry for your "assigned subject", READING in the *Thesaurus of ERIC Descriptors*. (located on Index Table 2.) What is the first narrower heading (NT) listed for that entry?

15. Basal Reading

Go to the area in front of the REFERENCE COLLECTION (J). Sit down at one of the LUIS terminals located on the long tables.

Type "MENU", press Enter. Select ERIC (1967 to 1987) by typing the line number, press Enter.

Type "sm=READING", press Enter.

16. Are there more than 500 entries for your "assigned subject"?

16. Yes

Type "1", press Enter.

From the list of entries, select one which is designated "ED." (If necessary type "F" and press Enter to continue to the next screen.)

(1) Type the line number of your selection and press Enter.

(2) Print the screen that appears, following the directions for printing which are mounted on the printer attached to the LUIS terminal you are using.

Repeat steps (1) and (2), for three or four more "ED" entries.

DO NOT PRINT SELECTIONS WHICH ARE DESIGNATED "EJ." *

Save your print-out to use in EXERCISE V, below.

NOW, GO BACK TO THE GUIDE AND CONTINUE THE SELF-GUIDED TOUR.

EXERCISE V : ERIC Microfiche

Look at your print-out from Exercise IV. Circle or highlight the ED number in each entry.

17. Go to the ERIC microfiche cabinets (S) and retrieve the microfiche corresponding to one of the ED numbers on your print-out.

Take the microfiche to one of the microfiche reader/printers. Follow the directions provided at the machine to make a copy of the first frame (i.e. the frame with the document resume on it). You will need to use a copy-card or 10 cents for this.

Look at the list of descriptors on your copy. Circle or highlight the descriptor that matches your "assigned subject", then attach the copy to this worksheet along with the printout from Exercise IV.

GO BACK TO THE GUIDE.

Appendix B

An adaptation of the following curriculum checklist, proposed originally at the 1979 conference of AECT, may be useful to help rank in importance the many tasks of the reference librarian.

Curriculum Awareness Checklist

Rank the following statements that describe the way you now participate in the development of your universities curriculum. The statements you rank #1 should describe the most important ways you are involved ; those you rank #2 should describe the ways you are involved that are of secondary importance ; and those that you rank #3 should describe the ways to be involved in curriculum that, at this point, have little place in your work.

I know I have participated in curriculum development because I have :

- a. _____ helped students who come to the library to do assignments.
- b. _____ shared new topic-relevant resources with faculty
- c. _____ scheduled class visits to the library.
- d. _____ participated in meetings of the curriculum committee, departments and general faculty.
- e. _____ kept records of materials professors have requested for purchase.
- f. _____ made systematic forms to record the kinds of materials professors and students borrow.
- g. _____ set up interviews with dept chairs to discuss their ideas and needs and to find out what they are teaching.
- h. _____ reviewed the textbooks used in the departments.
- i. _____ other _____