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ABSTRACT

Through the development and use of a computer databased bibliographic cataloging system, this practicum aimed to improve the organization and management of the non-print media collections housed in a Native American Indian reservation's high school language arts department and library in order for the teaching staff to gain better access to the collections' supplemental material that supports the English-as-a-Second-Language (ESL) program for the school's Limited English Proficient (LEP) students. A team of educators constructed the database from a commercial software package that cataloged the bibliographic information of non-print collections, designed the database screen, utilized 10 entry fields, and cataloged 1,528 titles. A training session was conducted with the teaching staff to demonstrate the database and to instruct on accessing techniques. Workshop materials were written and distributed. At the end of the implementation process, an analysis of pre- and post-survey results revealed that the high school instructional staff found the non-print media collections more organized and accessible. Staff perceived themselves as deriving greater use from their instructional efforts, and the collections were meeting their instructional needs at a greater level. Four tables, five figures and a diagram illustrate the database and findings. Twelve appendices provide survey instruments, workshop booklet, samples of the printed copy of the book catalog and thesaurus of descriptors, and the procedure manual. (Contains 56 references.) (Author/MAS)

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Enhancing the Management of a High School's Non-Print Media Collection
through a Computer Databased Bibliographic Cataloging System

by

David L. Fischer

Cluster 52 B

A Practicum II Report Presented to the
Ed. D. Program in Child and Youth Studies
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

NOVA SOUTHEASTERN UNIVERSITY

1995

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May 9, 1995

Date of Final Approval of Report

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ABSTRACT

Enhancing the Management of a High School's Non-Print Media Collection through a Computer Databased Bibliographic Cataloging System. Fischer, David L., 1995: Practicum Report, Nova Southeastern University, Ed.D. Program in Child and Youth Studies.

This practicum aimed to improve the organization and management of the non-print media collections housed in a high school's language arts department and library in order for the teaching staff to gain better access to the collections' supplemental material that support the English as a Second Language program for the school's Limited English Proficient (LEP) students. In order to improve the collections' organization and management, a team of educators constructed a computer databased bibliographic cataloging system.

The team considered many of the management issues of the collections and wrote a procedural manual that detailed many of the policies for the continued growth and organization of the non-print media. Then the team constructed a database from a commercial software package that cataloged the bibliographic information of the non-print media collections. They designed the database screen, utilized ten data entry fields, including a subject descriptor field that produced a published thesaurus of descriptor booklet that accompanied the database. The team cataloged 1,528 titles.

After cataloging the database, the writer conducted a training session with the high school's teaching staff in order to demonstrate the computer database and instruct on accessing techniques. Workshop materials were written and distributed to participants. Afterwards, the writer installed the database on several classroom computers; compiled, duplicated, and distributed a book format of the database; and assisted many staff members in accessing the database.

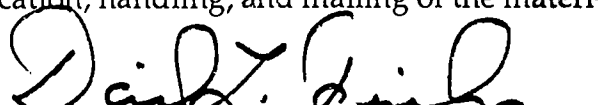
At the end of the implementation process, an analysis of pre- and post-survey results revealed that the high school instructional staff found the non-print media collections more organized and accessible which, in turn, they perceived themselves deriving greater use from in their instructional efforts and the collections were meeting their instructional needs a greater level, exceeding the practicum's anticipated results.

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CHAPTER I INTRODUCTION

Description of Community

The community of this writer's work setting is a small, rural town located on an Indian reservation in the southwestern United States. It is an economically depressed area where unemployment is a persistent problem as are the social ills of alcoholism, child neglect and abuse, and suicide (Sowers, 1994). The population of the community has reached 12,000 tribal members. The town is the seat of tribal government and the center of the reservation's activity. The tribe owns and operates a newly-opened casino and restaurant; sawmills; fish hatcheries; motels and resorts including a nationally-recognized ski operation; cattle herding; retail merchandising that includes a supermarket, liquor store, clothing outlet, gas stations, and a movie theater; and other enterprises which underwrites financially the tribal governance system. The Bureau of Indian Affairs (B.I.A.) is the second largest governmental agency on the reservation, operating extensive natural resource management of the tribal forests and lands, schools, health, and other administrative services.

By current tribal census figures (Hutchison, 1978), fifty percent of tribal members are under 17 years of age and the most rapidly growing part of the population. It has made a significant impact on the educational services provided by the county, state, and federal government. In the primary grades, enrollment has been increasing one hundred to two hundred percent over the last five years, taxing the school's financial and administrative resources as well as the school facilities.

Besides the public school system, other educational facilities serve the reservation. The B.I.A. runs two elementary schools run in the more remote parts of the reservation as well as a boarding school for students in intermediate and high school grades (sixth through twelfth). Religious denominations run two private elementary schools, the tribe financially underwrites a Head Start program and a day care center, The B.I.A. sponsors high school students on off-reservation boarding schools, and the Mormon church succors a placement program which sends students off-reservation to live and attend school away from home, family, and from reservation life and culture.

Writer's Work Setting and Role

The writer works at a public high school within the community described above, serving four hundred twenty students ages fourteen through twenty years. The school's population comes from the tribal community and a few students attending the B.I.A.-sponsored boarding school. The student population ethnicity is ninety-five percent Native American Indian with a small mix of Whites and Hispanics. The predominate culture of the school's population is Native American with sixty-five percent of the population identified Limited English Proficient (LEP) (Fischer, et al., 1990, 1992).

The school is organized departmentally around core subject areas. The sixty member staff is young with an average age of forty-two years. The average number of years working with the school district is nine years. The teaching staff hold a variety of degrees from bachelors through masters programs and doctoral students, all holding teaching certificate endorsements from the state education department. The staffing includes a principal, an assistant principal, four clerical

workers, six custodial workers, six cafeteria workers, two counselors, a nurse, a librarian, a computer lab technician/teacher, two classroom aides, and thirty-eight certificated teachers.

The facilities of the high school are fifteen years old, built in 1980 through a federal grant from Congress. The students enjoy a variety of support services including a bookstore, free breakfast and lunches subsidized by the federal government, full-time counseling services, full-time health care which is coordinated with the Indian Health Services of the tribe and the B.I.A., a modern school library, photography and dark room facilities, computer labs, and extensive physical education facilities. The funding for the programs is provided through several sources. Because the school district lacks an adequate tax base, funding is provided by the federal government through the Indian Education Equalization Act, the state, and through other federal and state governmental funding sources, including entitlement programs.

The writer's work site contains a plethora of instructional technologies. Over one hundred personal computer workstations reside in the classrooms and administrative offices. The staff utilizes both IBM and Macintosh platforms throughout the building. One can describe the teaching staff's expertise on the equipment from novice to expert power users of computer technology. The use the technology for staff and student productivity, for students to learn about technology and its usage in the workplace, and for computer assisted instruction.

The language arts department members of the high school and the school librarian helped implement this practicum. Because of the student population's need for English as a Second Language (ESL) instruction, the school board requires all high school teachers, counselors, and librarian to hold an ESL state

endorsement on their teaching certificate. The high school focuses it's instructional delivery towards English language development. It spends a great deal of time and energy in complying with state-mandated requirements for assessing, providing instruction for, and reassessing their LEP population.

The writer belong to the language arts department with its other five teachers and hold the department chairmanship. His responsibilities include guiding and directing the language arts department in its curriculum development and implementation; material selection, purchasing, and storage; and in fulfilling the school's state-mandated requirement for assessment and instruction of the LEP population by establishing policies and procedures of record-keeping, assessment, student scheduling, and reassessment.

Without sufficient bibliographic information contained in a cataloging system, the staff lacked a proper access tool to help locate and deliver this non-print material to the classroom instruction on a timely basis. Neither the library nor language arts department's non-print collection were cataloged, demonstrating an insufficient level of organization that would support greater access and, in turn, greater utilization. In fact, the staff underutilized the non-print media collection to support their ESL instruction.

Inadequate management of the collections has caused other important issues besides access and underutilization. The departments have purchased duplicate items for the two collections in the past years, causing a waste of financial resources because of the inadequate bibliographic information to make informed acquisition decisions. And there exist items within the collections that violate copyright and fair use laws that have not been erased or eliminated from the collection because of the missing bibliographic cataloging that would supply recording dates of off-air programs from television and cable sources. This could possibly put the school in financial jeopardy if these illegal activities were uncovered and then ordered to rectify the situation.

Problem Documentation

The writer substantiated the existence of the problem by gathering evident that showed the preceding problems of organization, access, utilization, and management did exist at the writer's work site; the source data came from interviewing the school librarian, surveying the teaching staff, and from a direct examination of the non-print media collections.

CHAPTER II

STUDY OF THE PROBLEM

Problem Description

This practicum focused on improving the management of the high school's non-print media collections that support and supplement the school's ESL instructional program which the entire teaching staff is trained to deliver. The collections were inadequately organized for the staff to effectively access the collection for support and enhancement of their ESL instruction and for the librarian and language arts department chair to adequately manage the collection properly.

Historically, the school has actively sought to provide the teaching staff with instructional materials that specifically address the instructional needs of their clients—the students. This has translated into allocating appropriate funding for the purchase of prerecorded audio-visual materials including video, audio, and multimedia presentations. Over the past ten years the non-print media collections housed both in the library and the language arts department have grown considerably as teachers developed an increasing need for this specialized instructional media through familiarity and use in their ESL classroom instruction. The collection's growth has been unsupervised; consequently, systematic bibliographic organization for effective access and management of the collection needed enhancement.

Specifically, the library and language arts department did not provide the leadership or management to furnish adequate bibliographic cataloging for their supplemental, non-print media collections for circulation to the ESL instruction.

In an interview with the school librarian about the library's non-print media collection, the following needs were identified: timely access to bibliographic information in a database that is easily updated on a regular basis, avoidance of duplicated materials between the two collections, avoidance and elimination of dated material, erasure of material violating fair use and copyright laws, and more support of the school's curriculum with better and more extensive use or circulation of materials. To support these generalizations, data was collected to quantify the librarian's observations.

The lack of organization and problems associated with accessibility of the non-print media collections were examined. The high school librarian and the writer observed on at least fifteen occasions during a one month observation period staff members browsing through the collection to find items on a particular subject or topic. Their method of browsing could be described a "brute force" examination of the holdings, scanning and examining two or three drawers or shelves of cassettes before asking for help, finding two or three titles, or giving up in frustration.

The writer surveyed the high school staff as to their perception of accessibility, level of organization, utilization, and management of the non-print media collections in the library and the language arts department (see Appendix A). The results of this survey are contained in Table 1.

Table 1

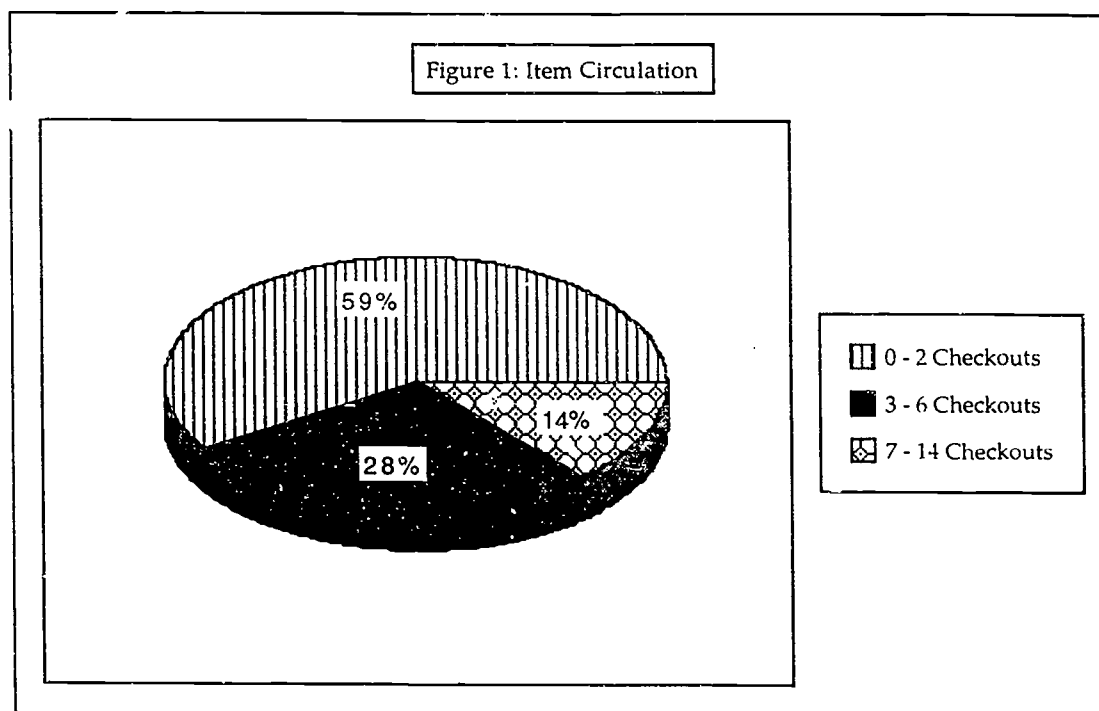
Results of Survey of Organization and Use of the Non-Print Media

| Area of perception | mean response |
|-----------------------------|---------------|
| accessibility | 3.62 |
| organization | 3.10 |
| utilization | 2.00 |
| meeting instructional needs | 3.24 |

From a survey of the staff's perceptions of the two collection's accessibility, a mean score of 3.62 was obtained on a Likert scale response (5 for "extremely easy" to a 1 for "extremely difficult") in efforts to access the non-print media collections, showing that the staff's efforts in trying to identify materials that fall within a specific topic area to be somewhat difficult to reasonably easy. And from the survey, a mean score of 3.10 was obtained (5 for "exceptionally well organized" to a 1 for "totally disorganized"), showing that the staff perceives the collections to be moderately organized.

The underutilization of the non-print media collections was examined by surveying the staff's perceptions and in an examination of the two collection's check-out cards attached to every item. In an examination of the circulation check-out cards of 200 randomly selected videocassettes from both collections, it was found that fifty-nine percent of the sample had cassettes with little or no circulation (zero to two checkouts in the last three years), twenty-eight percent

had moderate circulation (three to six checkouts in the last three years), and fourteen percent of the cassettes with heavy circulation (seven to fourteen checkouts in the last three years) (see Figure 1).

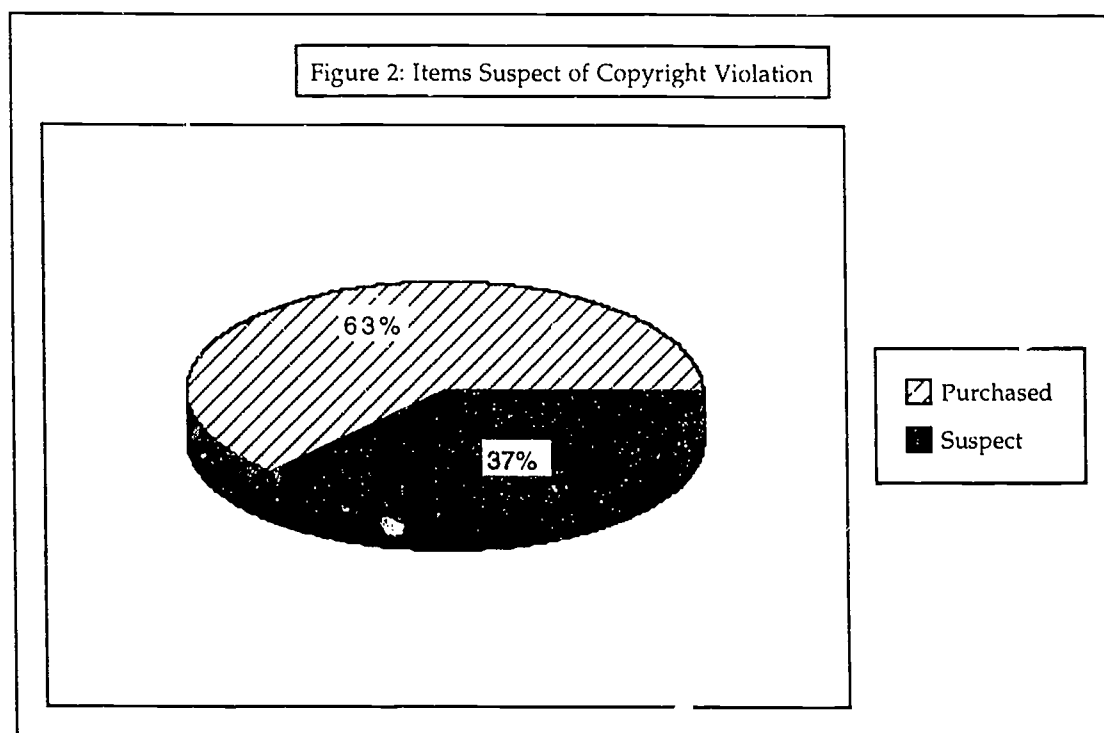


From the survey of the staff's perceptions of their own personal utilization of the two collections, a mean score of 2.00 was obtained on a Likert scale response (5 for "more than once-a-week" to a 1 for "a couple of times a semester"), demonstrating their efforts to support their instruction with titles from the non-print media collections. This shows that the staff's average utilization of the materials tends towards a monthly basis. Also obtained from the survey were the staff's perceptions of how well the non-print collections meet their instructional needs. A mean score of 3.24 was generated from the Likert scale responses (5 for "extremely well: materials frequently meet my needs" to a 1 for "extremely inadequately: rarely meets my instructional needs"), showing

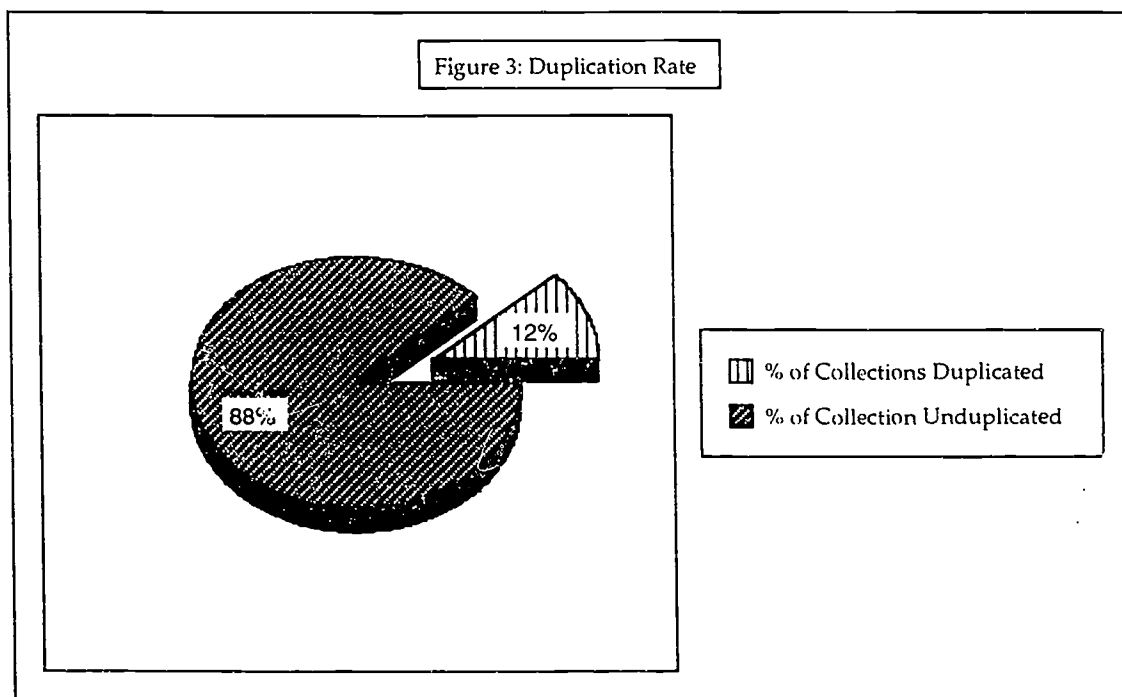
that the staff perceives the collections to be an modestly adequate source of supplementary material yet, underutilized.

Finally, the writer examined the mismanagement of the non-print media collections for items that possibly violated copyright and fair use laws and for duplicate titles contained in both collections.

There existed video recordings within the collection that violate copyright and fair use laws that have not been erased or eliminated because of inadequate bibliographic information that would supply recording dates of off-air programs from television and cable sources, possibly causing the school to be financially in jeopardy if these illegal activities were uncovered. In a preliminary examination of 400 videotape titles from the two collections (200 from each location), the writer found 147 tapes, or thirty-seven percent, taped off-air and possibly suspect of copyright violation (see Figure 2).



The school has purchased duplicate items for the two collections in the past years, causing a waste of financial resources because of the inadequate bibliographic information to make informed acquisition management decisions. In a survey of 200 titles of videocassettes in the high school library, the writer found twenty-four duplicated library titles within the language arts department's collection, demonstrating the possibility that there is a ten to fifteen percent duplication rate. With an average cost of one item ranging from \$20.00 to \$90.00 per title, the high school has wasted over \$1,000.00 with these twenty-four duplicated titles (see Figure 3).



Causative Analysis

The causes of this disorganization, underutilization, inaccessibility, and mismanagement of the non-print media collections are varied and point towards a lack of leadership and planning. The acquisition of supplemental materials for the school's ESL instruction has been funded adequately for the language arts department over the last ten years. The department has enjoyed a period of steady purchasing of non-print media; however, the library has only recently gained sufficient funding to acquire a sizable collection of non-print media to support the ESL program for all high school departments. This has led to unplanned and unmanaged growth of the collections. Inadequate administrative leadership allowed the two departments to purchase their own non-print materials without a strategic plan to chart a course of comprehensive and instructionally appropriate purchasing, housing, inventory or cataloging, nor, interdepartmental access to the growing accumulation of supplemental, non-print media.

With the rapid growth of the school's media collection, the librarian has not changed her perceptions about the non-print media collection. It has not been given the same management attention in bibliographic cataloging and access that the printed materials have enjoyed.

Relationship of the Problem to the Literature

The literature has considered many causes of the problems outlined above. Inadequate management of a non-print media collection with respect to cataloging, access considerations, utilization of the collection, understanding the needs of the collection's clients, and the common attitudes of librarians and

teachers towards non-print material (Rodgers, 1982; Inter, 1984; Olson, 1985; Daily, 1986; Nelson, 1990; Potter, 1990; Quint, 1990; Burton & Petrie, 1991; Kranch, 1991) are some of major issues the literature enlarges upon.

The literature points out the need for a quality infrastructure of a non-print media collection that allows the members of the user community to utilize it effectively without having trouble getting to it and to create this organization with a minimum of wasted effort (Inter, 1984; Olson; 1985; Daily, 1986). The problem of accessibility is an important issue and is one librarians and media specialists have been struggling with during the past twenty years. They have been developing methods to adequately and properly catalog non-print media (Rodgers, 1982; Inter, 1984; Olson, 1985; Kranch, 1991), including the use of computer systems using databases to meet client needs of accessibility (Inter, 1984; Potter, 1990; Quint, 1990; Burton & Petrie, 1991). The use of computers to catalog collections solves many accessibility and management of non-print media is supported. The literature casts predictions that the need for staff training will become an apparent problem if and when computer catalog access is utilized. Teachers historically have had difficulties in integrating non-print media into instruction as well as using computers to locate instructional materials (Baker, 1985; Montgomery, 1992; Flanders, 1993; Triche, 1993; Hawkins, 1994) and display resistance to innovation, especially to media and technology (VanWyck, 1976).

Several sources discuss the problems associated with the management of a non-print media collection. Daily (1986) examines the problems associated with the characteristics of the institution where the collection resides. Quality management must define any media collection and its patrons. Different levels

of organization must be provided for each medium of information with accessibility needed for efficient service. Effective management must address the ethical use of non-print materials. The literature mirrors similar problems other institutions have had in trying to abide with copyright and fair use considerations with non-print materials (Johnson, 1987; Reed, 1987; Sinofsky, 1987; Miller, 1988; Public Broadcasting Services, 1989).

Researchers note that the attitudes of librarians, teachers, and the public towards non-print materials play a significant role in creating problems for successful management of such collections (Inter '984; Daily, 1986). Often librarians and administrators do not value non-print material as highly as printed material and therefore is not given the same status in bibliographic cataloging. Oftentimes it is left out completely. Librarians' perceptions of non-print media as a single kind of material significant primarily in its differentiation from printed material is often a cause for the lack of adequate management of non-print collections. And mass media are sometimes viewed as a destructive force continually enlarging the gap between people and books (Inter, 1984). These attitudes often result in poor or absent management of an institution's non-print media collection.

Other important considerations in managing the problems inherent in a non-print media collection is the definition an institution holds of what constitutes a media collection (Inter, 1984; Olson, 1985; Daily, 1986). How a collection is cataloged, shelved, what equipment is necessary to project or play back the various media, and the policies of access become important considerations in trying to provide quality management of the collection. This ties directly to the librarian's responsibilities in meeting the needs of the

collection's clients (Potter, 1990; Quint, 1990); the issues surrounding how the cataloging of the collection is accomplished and its accessibility (Rodgers, 1982; Inter, 1984; Olson, 1985; Daily, 1986; Nelson, 1990; Kranch, 1991); and the need for developing a procedural manual to guide the management of the collection (Daily, 1986).

The literature provides important support that the problems incurred with similar institutions amassing non-print media collections and subsequently trying to effectively manage them are common. It discusses similar difficulties other school districts (Vermont State Department of Education, 1981; Gotanda, 1984; Moore, 1984; Baker, 1985; Estes, 1986; Friderichsen, 1986; Flanders, 1993), public libraries (Lewis, 1985), hospitals, and college or university libraries (Silver, 1987; Lee, 1989) have in managing their non-print collections.

CHAPTER III

ANTICIPATED OUTCOMES AND EVALUATION INSTRUMENTS

Goals and Expectations

The goal for this practicum was to have the high school's non-print media collections in the library and language arts department more highly organized for effective access by the teaching staff so that their ESL instruction is supported and enhanced with the available supplemental media contained in the collections.

Expected Outcomes

Once steps have been taken to rectify the problems noted above in the non-print media collections, it was expected of this practicum that better management of the collections would be initiated with a complete cataloging of the non-print media residing within the two collections. Once the high school staff had had opportunities to utilize the collection's bibliographic catalog, they would show greater use of the non-print media in supporting their ESL instruction by a positive move on a post survey of their perceived use. The survey would show a change from a mean Likert scale response of 2.00, representing "monthly" use to a mean response of 2.50, representing greater use than on a monthly basis.

The staff would also find the non-print media more accessible by a positive move on a post survey of their perceived accessibility of the media collection from a mean Likert scale response of 3.65, representing their access efforts to be "somewhat difficult" to "reasonably easy" to a mean response of

4.0, representing their access efforts to be "reasonably easy".

Furthermore, the high school staff will find the non-print media better organized for easier retrieval for use in their classroom instruction by a positive move on a post survey of their perceived organization of the media collection from a mean Likert scale response of 2.52, representing that the collection is somewhere between "somewhat disorganized" and "organized" to a mean response of 3.50, representing a perception that the collection is somewhere between "organized" and "reasonably well organized".

And because the high school staff will utilize the non-print media more frequently because of its improved management and organization, the staff will notice that the collection will better meet their instructional needs. This will be shown by a positive gain on a post survey from a mean Likert scale response of 3.24, representing that the collection adequately meets instructional needs to a mean response of 3.75, representing a perception that the collection is more reasonably meeting instructional needs.

The library and language arts department would take greater charge of the management of their non-print media collections by creating a procedural manual addressing the organization, access, and instructional needs of the teaching staff of the collections, including ways to eliminate titles that violate fair use and copyright laws and duplication of titles in the processes of acquisition and retirement of the collections' material.

Measurement of Outcomes

The standard of achievement of this practicum was the cataloging of ninety-eight percent of the high school's library and language arts department's non-print media collections using some form of a computer database, the writing of a procedural manual outlining the cataloging and managerial policies and procedures, the publication in booklet form of the computer database catalog distributed to one hundred percent of the staff, the attendance and participation of sixty percent of the high school faculty at a staff in-service that would train them on the access and use of the computer database catalog, the installation of the computer database catalog on six computers in the high school, and a response of fifty percent of the staff on a post-survey that demonstrated positive gains in greater perceived utilization, organization, and access of the non-print media collections.

CHAPTER IV

SOLUTION STRATEGY

Discussion and Evaluation of Solutions

As stated earlier, the library and language arts department collections of non-print media are inadequately organized for the staff to effectively access them for support and enhancement of their ESL instruction and for the librarian and language arts department chair to adequately manage the collection. The focus is on improving the management of the non-print media collections that support and supplement the school's ESL instructional program. In order to rectify this situation, several possible answers to this problem are gleaned from the literature and evaluated as to their feasibility.

The literature discusses three broad topics that suggest ways to rectify the problem: effective policies and procedures that govern the management of a non-print media collection, the utilization of non-print media in instruction, and staff development in managing and utilizing the collection's resources. Each area will be outlined in detail, highlighting the various remedies researchers and practitioners in various fields have addressed in solving inadequate organization of non-print media collections.

In order to adequately manage a non-print media collection, the literature advocates the collection and reflection upon specific information to guide and govern the management process. Inter (1984) recommends that a clear definition of the collection must be made so it includes and describes what is the scope and breadth of the items contained in a non-print media collection. Managers must understand the characteristics of their institution, the clients they serve, and the

common attitudes of librarians and administrators who manage media collections, and informing their decision-making processes with useful input (Rodgers, 1982; Inter, 1984; Olson, 1985; Daily, 1986; Nelson, 1990; Potter, 1990; Quint, 1990; Burton & Petrie, 1991; Kranch, 1991).

Effective management of the technical service operations of any media collection is important for improving its organization and effective client access (Inter, 1984; Lewis, 1985; Daily, 1986). Practical steps in the selection, order records, cataloging, post-cataloging operations, policy and procedures formation, loan period, checkout techniques, and inspecting returns must be carefully formulated and implemented in managing non-print media collections. Built into the technical services must be the formulation of policies and subsequent procedures that address the legal concerns of copyright and fair use issues of reproduction, off-air taping, duplication, and distribution (Voegel, 1986; Johnson, 1987; Reed, 1987; Sinofsky, 1987; Miller, 1988; Public Broadcasting Services, 1989; Sivin & Bialo, 1992; Flanders, 1993).

In order for a non-print media collection to have continuity, Daily (1986) recommends that a procedural manual be written. All the decisions made about a collection are recorded in the manual along with examples of the bibliographic entries made and statements of policy that may be forgotten although they govern the procedures implemented. Daily explains that the manual would be a guide to the maintenance of the collection.

The literature suggests that effective management of a non-print media collection must address the overriding concern of access by clients seeking to view, read, and use the items within any collection. They must be effectively organized so that patrons can find what has been selected for their use (Miller &

Terwillegar, 1983). Inter (1984) states that, "successfully managing media collections requires that the purpose of the collection and its end users be clearly identified; and also that one of the most important benefits of enhanced access, if implemented, be in keeping with those purposes" (p. 15). She also defines access as availability, and the availability of information is the business of librarianship. Accessibility includes policies that allow for physical access to the collection on site, the times the collection is available for inspection, circulation procedures, and the scheduling of special equipment to reproduce the recorded information (Inter, 1984; Daily, 1986). Daily (1986) suggests that a community survey be conducted periodically to ascertain the needs of the clients the collection serves.

Another critical component of access is the availability of bibliographic information about the items in a collection. This process is known as cataloging—the major focus and work for most librarians. Cataloging systematically records identifying information about each of the items in a media collection resulting in a catalog. Using a catalog of any collection is a primary access method for most patrons. It gives clients tools of organized information about the collection that hopefully facilitates purposeful access. The literature reveals a great deal of information on how to catalog a non-print media collection and will be the focus of the next several paragraphs; however, Inter (1984) reminds the cataloger that how a catalog is organized has far-reaching consequences for the eventual use of the materials in a non-print media collection, for the purpose of access is the eventual use of collections.

One must consider the prior knowledge, training, experience, and skill clients possess in using bibliographic access methods like a catalog (Inter, 1984; Olson, 1985; Daily, 1986; Kranch 1991). Practitioners suggest that the clients must

be considered when organizational methods are applied in compiling a catalog. Historically, specialized indexes for non-print media were organized in ways that impeded client access. Quint (1990) explains that non-print media collections were difficult to access because they were separate from main catalog listings and patrons were given preferential access (Potter, 1990). Also the bibliographic data at times was insufficient and the effort it took clients to locate items of interests was unacceptable. Therefore, the literature advises catalogers to make their catalogs user-friendly by including sufficient bibliographic data organized in ways understandable to their clients. The use of alphabetic systems and a thesaurus of subject descriptors that has a controlled vocabulary is advocated (Inter, 1984; Means, 1985; Kranch, 1991). Inter (1984) states,

It is assumed here that effective management of any collection of information can be measured in terms of resulting public service, not only in terms of operational efficiency. . . . A balance between what is an ideal result and what is a realistic possibility has to be struck. Simplifying the cataloging for each item may make it more efficient, but the result may not contain enough information to serve the needs of the users of the information (p. 15).

The procedures in cataloging the bibliographic information of non-print media collections has been a recent focus of the literature (Rodgers, 1982; Inter, 1984, Olson, 1985; Kranch, 1991). As seen, the needs of the clients utilizing the catalog must be taken into consideration when compiling a catalog. Moreover, the literature gives specific guidelines in how to catalog non-print material. Practitioners advocate using an accepted standard cataloging format to record the bibliographic data of the items in the non-print media collection (Daily, 1986; Inter, 1987; Epstein, 1990; Kranch, 1991). Professional library organizations have developed standard cataloging formats that prescribe sets of rules for cataloging

the bibliographic information of non-print media. Graham (1985), Olson (1985), and Kranch (1991) recommend the use of rules developed from the second edition of the Anglo-American Cataloging Rules (AACR 2) or the MARC Films Format.

Beyond the rules developed from professional organizations, Means (1985), Daily (1986), and Flanders (1993) present several suggestions for cataloging non-print media. Since the high school's collections consist mainly of videocassettes of films, it is advisable to catalog motion pictures under the title of the work because they represent what is truly a corporate venture, not an individual author. They also recommend that the entire collection be organized around a standard list of subject headings and accessed by key words in a title or in a thesaurus of subject heading descriptions (Inter, 1984; Means, 1985; Kranch, 1991), arguing that this has proven to be one of the most effective ways of organizing a non-print media collection. Organization by subject access greatly aids the client, usually a novice, Daily (1986) notes, who needs this method of access to the file of bibliographic entries.

If a media collection similar to the high school's contains mainly videotape recordings of motion pictures, each bibliographic entry should contain not only the title of the film and subject headings identifying the general content of the film, but, as Inter (1984), Olson, (1985), Daily (1986), and Flanders (1993) advocate, a short summary or annotation should be included that describes the content as exactly as possible. Before clients invest their time to watch a particular film, they must know its contents before they ever begin—a hallmark of quality accessibility specific to non-print media which cannot be previewed and

examined like a book. Annotations tend to save time on playback machines, wear on the recorded materials, and save time for client users. Daily (1986) suggests that annotations be from twenty-five to a hundred words in length, void of evaluative words or criticism, and either derived from vendor descriptions or written directly by the librarian.

Daily (1986) notes that there are three major formats for cataloging: the use of a card catalog, the use of book or pamphlet publication, and the use of a computer database. Each method has its strengths and weaknesses in accessibility. The use of card catalogs as noted by Inter (1984) for media collections was once the most common cataloging method. School libraries were the most enthusiastic collectors of media as well as the first to begin standardizing cataloging procedures for non-print media. They began applying bibliographic techniques used for cataloging printed material and the use of the card catalog system as the major production of their efforts. The overarching access problem with a card catalog is that there is usually only one physical catalog. As an access media itself, it is nearly impossible to duplicate, may reach enormous proportions in large collections, expensive to house and maintain, and vulnerable to destruction and wear. It must reside physically in the library. Yet, on the positive side, a majority of library patrons understand the card catalog systems because of its long enjoyed use and its organizational methods have been taught in schools for the past century (Miller & Terwillegar, 1983).

With the advent of typewriters, inexpensive duplication technology, computers, and the increasing needs of patrons, librarians began to maintain a record of media holdings separate or in conjunction with the card catalog in various forms of book catalogs. These were typed by-hand or were generated by

computer (Miller & Terwillegar, 1983; Inter, 1984). Book catalogs have several drawbacks, however. They must be updated periodically, making previous copies obsolete and new issuances a must. Updating with new entries and changes bibliographic information can be cumbersome if it means retyping an entire catalog. The laborious task of retyping keeps this format useful only for very small non-print media collections. Copies are limited to a small number of patrons as well. However, if the updating and subsequent reprinting of the book catalog is accomplished by computer, the task becomes more easily and inexpensively accomplished (Daily, 1986; Flanders, 1993). Which leads this discussion to the use of on-line storage and access of bibliographic information on a central computer system.

The use of computers in cataloging non-print media collections is strongly and widely advocated in the literature (Inter, 1984; Teach, 1985; Daily, 1986; Nelson, 1990; Potter, 1990; Quint, 1990; Burton and Petrie, 1991; Kranch, 1991; Flanders, 1993). The benefits of on-line cataloging for print and non-print collections can be enormous. The bibliographic entry for non-print media on computer access or card catalog is nearly the same, but at today's mass storage capacities on CD-ROM, computers can hold far more information than card catalogs and are not subject to the same kinds of deterioration as noted above (Daily 1986). As manual files like card and book catalogs become larger and more complex, they are more difficult to search for key words in titles or subject descriptors. Computers databases, on the other hand, are uniquely capable by design to search a whole catalog quickly and easily (Inter, 1984; Daily, 1986; Nelson, 1990). As Quint (1990) notes about the cost-effectiveness of computers, "...online databases still offer the most 'bang for the buck' of any information

technology" (p. 9). Teach (1985) recommends computer cataloging because clients will, in the future, be able to electronically access the database through advances in telecommunications, the private use of personal computers and modems in the homes as well as sharing databases for inter-library loan access on the local, state, and national level, including the inclusion into film and video libraries of other locations through membership in a consortium.

The use of computers in library settings at the time of this practicum is widespread and flourishing. As an example, Burton and Petrie (1991) outline the many advances in library microcomputer use. They explain the electronic workings of microcomputers, including peripheral devices, the use of software for libraries, systems for information retrieval and data management, applications in information retrieval and management, computer resources, and selection criteria for software as well as hardware. In particular, Peters (1985) and Burton and Petrie (1991) give updated information as to the construction of online catalogs including screen display layout, guidelines for retrospective catalog conversion (the process of taking a card catalog or a collection's bibliographic information and converting it to an online electronic catalog), subject indexing, and procedures for small-scale information retrieval systems.

The literature also has a great deal of advice and recommendations in cataloging the specific bibliographic information of a non-print media collection onto a computer database system. As discussed earlier, Means (1985) and Kranch (1991) recommend the important process of defining a standard thesaurus of descriptors used in defining the subject content of a non-print media collection so to maintain consistency in the database and advocate the use of a controlled vocabulary in subject headings for current educational non-book materials,

especially for films and videocassettes. Computer cataloging allows easy access, points to the terms in a thesaurus, generating alphabetical displays of terms followed by their cross-references in a word-by-word alphabetizing sequence and grouping of the terms under broad subject categories.

Baker, (1985), Peters (1985), Burton and Petrie (1991), and Kranch (1991) relate the importance of quality screen displays of the bibliographic data of each media item and outline several cathode ray tube (CRT) screen display designs for public online systems of bibliographic information. Peters (1985) discusses two major issues: the format and arrangement of specific data elements on the screen and the amount of information that is to be displayed for a particular user and proposes many solutions to the problems of layout, content and sequence, vocabulary, typography, spacing, punctuation, and the use of color and graphics.

Two practitioners in the field (Baker, 1985; Flanders, 1993) have described their solutions to the management of non-print media collections in a school setting and are summarized here as examples of whole systems management possibilities. Flanders (1993) discusses a specific solution to cataloging a videotape collection in the media center of a public school district in Florida. He recognized the need to develop an efficient way of organizing their non-print materials collections (which consisted mainly of videocassette recordings from cable programming) so that their teachers and students could gain easy access. Drawing from his personal experiences with using computer databases for personal productivity needs, he chose a personally familiar commercial database that was compatible with his school district's computer hardware. He gives personal, first-hand description of the software he self-selected and the processes used in creating the catalog database of his non-print media collection. Flanders

(1993) reports that the database selected was simple to use in building the database, it allowed easy organization and access to his non-print media collection, utilized his basic computer skills, was cost-effective, and provided his school with a valuable resource.

Flanders (1993) then details how teachers accessed the developed computer database catalog, noting the strengths of on-line access for enhancement of instructional delivery. His media management procedures are outlined that include the scheduling and delivery systems of videotaped programs from cable service purchased by the school district and how copyright restriction procedures are followed. Flanders reported that once the database was created, it gained frequent use by the media center and its clients, including the need to print a simple catalog for distribution to the district's various school sites, that media specialists in his geographic area began requesting copies of the database on floppy disk to include in their cataloging, and that the number of requests from the teachers for items from the non-print media collection dramatically increased.

Baker (1985) profiles a large elementary school of 500 students in Ohio and their need for managing a collection of computer software that came out of the school venture to purchase and use computers in its classrooms. The author defined the problem at her work site as the need to manage a collection of non-print media, that of computer software. Criteria for selecting the computer database software for cataloging was given, specifying that it needs to be very easy to use, flexible for different applications, and independent of administrative control. The author outlines how the school cataloged its microcomputer software, courseware, and related materials. The system developed allowed for

the identification and retrieval of instructional information, produced hard-copy versions of the catalog from the disk-based catalog, provided for circulation procedures, and encouraged teachers to utilize the computers, software, and courseware to enhance instruction.

After Baker (1985) invented the computer catalog of her school's software, she developed and implemented teacher workshops to train the teaching staff on how to access the computer database and integrate its use in identifying and locating computer software for classroom instruction. The author conducted pre- and post- surveys to the perceived access needs of the instructional staff and noted positive gains in the teachers' perceptions in the access, organization, and utilization of the school's computer software/courseware.

Another important area the literature addresses that relates indirectly to the problem outlined thus far is the use of non-print media with special student populations. The literature supports the use of non-print media with LEP pupils in a wide range of subject areas to increase their comprehensibility of subject matter as well as in direct ESL instruction (Heaton, 1979; Ovando & Collier, 1985; Reilly, 1990; Arizona Department of Education, 1990; Phoenix Union High School District No. 210, 1991). The use of non-print materials in instructional practices with Native American students is also supported (Williams, 1983; Pearce, 1986; Heidenreich, 1986). Therefore, it is the proper focus of this practicum to examine issues surrounding the access and utilization of non-print media in the school's instruction.

The literature recommends staff development programs when an innovation needs to be adopted (Baker, 1985), especially if and when computer technology is introduced into the work setting (Bitter and Yohe, 1989; Bruder,

1989; Scrogan, 1989; Sturdivant, 1989; Finkel, 1990; Hirschbuhl, 1990; Buchsbaum, 1992; Hawkins, 1994).

Hawkins (1994) discusses the importance of technology as a key ingredient in the professional development of teachers, stating that there are three critical factors for successful professional development: intensive experiences with experts and new resources, support from an outside advisor or coach, and exposure to other teachers' practices and participation in ongoing, reflective dialogue with colleagues doing the same job. It takes time and mobility to incorporate new practices into teaching repertoire, especially when it comes to the use of technology Hawkins (1984) notes.

"The success of technology in education depends on the teacher's competence in using existing methods and adapting to future developments," (p. 22) argues Bitter and Yohe (1989) in their discussion of preparing teachers for technology.

The literature's suggested recommendations in enhancing the high school's management and organization of its non-print media collections now need a careful evaluation as to their feasibility and utility within the writer's work site. The high school's non-print media collections do need a more adequate definition that reflects an understanding of the writer's work site, the patrons served by the collection, and the common attitudes held by the teaching staff, the librarian, and the writer's own perceptions of the need and use of non-print media. The suggestion of a procedural manual as suggested by Daily (1986) is a realistic solution to many of these management problems. The above concerns as well as a description of the library and the language arts department's technical service operations can be detailed. A must is the inclusion of clear ethical guidelines for complying with copyright and fair use laws.

As noted in the problem description and documentation, the teaching staff need better avenues of accessibility to the non-print media collection and the literature also mirrors this concern. The literature outlines several feasible policies and procedures concerning physical access, shelving, circulation, and scheduling of equipment that can solve some of the problems associated with the high's school media collections. And the periodic use of a survey as Daily (1986) suggests to ascertain the needs of the clients the collection serves is noteworthy. These are, however, secondary concerns which may come to the forefront as more pressing issues are solved. These access policy decisions should also be included in the procedural manual as discussed above.

The primary issue for the high school's collection is the need for a systematic and organized cataloging of its bibliographic information. The literature agrees with the importance and scope of this problem and gives several acceptable solutions. When cataloging efforts are considered and its format chosen, the writer needs to be aware of the technical expertise of the teaching staff in accessing the bibliographic information as well as the strengths and limitations of card, book, and computer catalog formats. Foremost is the need for making any cataloging efforts user-friendly as noted above. The suggestions of using a thesaurus of subject headings and annotations in the bibliographic entry for non-print media cataloging are sound and give the cataloging efforts greater avenues of accessibility for its patrons.

The literature strongly recommends using standard cataloging rules. Daily (1986) notes, however, ". . . the rules are less a matter of necessary information for a bibliographic entry than a way to save the time and energy of the cataloger by limiting the amount of detail in the bibliographic entry to what

the most frequent user of the files has to obtain" (p. 21). And Gregor and Mandel (1991) state, "... catalogers are encouraged to rely on both cataloging rules and their own judgment" (p. 45). This advise will be taken seriously when a solution strategy is discussed.

Computer cataloging is advocated throughout the literature and worthy of consideration. The strengths in utilizing a computer database and its accompanying software are enormous. The ability of an application program to globally search and find key words and phrases would enhance access to the non-print media once cataloging was accomplished. Also the ease with which computer databases can generate specific or global reports and print them in usable formats is also noteworthy. The literature advises the use of computer cataloging for future ability to connect to larger local area networks and the use of standard cataloging formats for compatibility with other databases connected electronically over phone lines. This rationale does support the use of computers at the writer's work site even though this advanced stages of remote access are presently impractical, but doors of opportunity do need to be kept open.

The literature assumes that computer systems approaches to cataloging are cost-effective and an efficient use of time. Yet, if equipment and software were to be purchased to alleviate the management problems of the non-print media collections, costs might be prohibitive. Also the need for training on specific computer systems would have to be sought. This could also make automated systems impracticable if the school personnel have no background in computer use.

Recommendations of computer hardware and software solutions for bibliographic cataloging is widely available in the literature and could be useful

in selecting a specific computer system. Baker (1985) and Flanders (1993) suggestion of inventing one's own catalog database using a commercial database is useful. It allows the librarian to custom design the database to meet the local needs of the patrons and the bibliographic information contained in the collection. Peter (1985) and Burton and Petrie (1991) suggestions for screen display layout and retrospective cataloging conversion procedures could be helpful if one develops a catalog database as noted previously.

Of all the research noted, Baker (1985) and Flanders (1993) are closest to the problems faced by the writer in his work setting. Their solutions are noteworthy and useful. They advocate the use of a computer database designed on-site to catalog a collection of non-print media. Both found the cataloging process not too complex and solved many organizational and access issues, thereby enhancing the management of their non-print media collections. They both give concrete suggestions for what to include in the computer-generated bibliographic entry and both practitioners report their resultant database widely used by their patrons, demonstrating increased access and utilization of their media collections. These positive results in their efforts at enhancing their local problems of management of their media collections is important to note.

Since part of the problem stated previously is getting the teaching staff to use more frequently the non-print media in their instructional efforts for the ESL, Native American student population, it is noteworthy that the literature supports the use of a wide variety of media in second language instruction. This underscores the urgency and necessity of solving the management and organizational problems of the non-print media collection so that it is better utilized by the staff and, in turn, facilitates the second language learning of the high school's pupils.

Throughout the review, the literature points towards the need for staff development in the use of access tools like a bibliographic catalog and the use of computer systems if this format is chosen. It recommends augmenting the teaching staff's knowledge, experience, and skill development in the use of computer technology, especially when it is used in bibliographic access/library arena. Researchers and practitioners alike give practical advice and information in developing practical staff development programs. To make the needed changes in the management of the media collections, staff development can be a fruitful avenue of approach and will enhance the staff's acceptance, use, and full adoption of changes implemented.

Description of Selected Solution

In order to fulfill the goals and expected outcomes of this practicum to enhance the management of a high school's non-print media collection serving an ESL, Native American population, the writer proposes, under his leadership and guidance, to have a team of teachers create a computer catalog database; write a procedural manual to guide the management of the collection; and develop, write, and present an in-service teachers' workshop to train the staff in utilizing the developed computer database and increase their integration of the non-print media into ESL instruction. Specifically, the writer will take a committee of teachers through several stages of catalog development which will include:

1. conducting meetings to assess the non-print media collection, identify problems of access, share data gleaned from initial survey of staff, and formalize the goals and procedures of the computer cataloging.

2. Assemble the cataloging work force, schedule training and work sessions, identify computer hardware and database software for cataloging, and request and purchase any supplies needed for cataloging.
3. Design a database and its screen entry for cataloging and conduct a preliminary cataloging session to operationalize procedures. From data gathered at preliminary cataloging session(s), develop cataloging training materials for cataloging work force.
4. Schedule and conduct cataloging sessions and develop a thesaurus of subject descriptors concurrent from cataloging sessions.
5. Reassemble the original committee to conduct computer simulations to fine-tune the database catalog and establish access procedure and rules.
6. Develop and write a procedural manual outlining the policies and procedures for the continued cataloging of the non-print media database, addressing the organization and staff access to the catalog and media collections.
7. Develop in-service materials for the staff development and conduct staff in-service to train teachers to access the database and its integrated use in material selections for ESL instruction.
8. Print and distribute the database in a bound document format as well as install on various teacher computers on an at-request basis.

There are several reasons that justify the selection of this set of solutions. In order to manage the non-print media collections adequately, a first step will be to organize a bibliographic catalog. In designing and developing procedures for

cataloging the collections, there is ample directional help in the literature. The writer is prepared to use the recommendations of Graham (1985), Olson (1985), and Kranch (1991) to use the rules developed from the second edition of the Anglo-American Cataloging Rules (AACR 2) in developing the basic bibliographic entry, keeping in mind the overriding concerns of the patron's access needs in determining what bibliographic information is necessary. Within this process the writer will use the idea of a thesaurus of subject descriptors that has a controlled vocabulary advocated by Inter (1984), Means (1985), and Kranch (1991). The bibliographic entries will also include a short summary or annotation as advocated by Inter (1984), Olson (1985), Daily (1986), and Flanders (1993). These solutions gleaned from the literature have merit in increasing accessibility and will certainly enhance the quality of the cataloging.

The justification for the use of computers in cataloging the non-print media stems from the strong support the literature has both in terms of library use (Inter, 1984; Teach, 1985; Daily, 1986; Nelson, 1990) and in its advocacy for staff development (Bitter and Yohe, 1989; Bruder, 1989; Scrogan, 1989; Sturdivant, 1989; Finkel, 1990; Hirschbuhl, 1990; Buchsbaum, 1992; Hawkins, 1994). Additionally, computer utilization to the task of cataloging and on-line retrieval of bibliographic information is justified by the successful application of computer technology to similar problems encountered by Baker (1985) and Flanders (1993) in cataloging non-print media collections at similar work settings. Their positive results are encouraging and their procedures will be modeled.

Up-to-date computer technology is available both in appropriate hardware and software at the writer's work site. The staff is already utilizing computers in their classrooms. And the writer himself has extensive knowledge, experience,

and skill in using computer databases. He is literate in several database application programs which will help in organizing and training others in the use of computers in the cataloging process. The writer's expertise will also facilitate the invention of the on-site database to solve many of the local organizational, managerial, and access problems. These on-site considerations warrant the use of computer technology in this solution strategy.

The recommendations of Baker (1985), Peters (1985), Burton and Petrie (1991), and Kranch (1991) in providing quality screen displays of the bibliographic data will be noted and their ideas of CRT screen display designs for public online systems of bibliographic information will be utilized. Also the idea of a book catalog generated by computer suggested by Miller & Terwillegar (1983) and Inter (1984) is a useful idea that can be adapted to local circumstances. Both of these suggestions will allow the staff greater access to the newly-generated catalog as will installing the computer database on teacher's computer workstations throughout the building.

Report of Action Taken

Once the practicum office approved the writer's practicum proposal, he implemented the following activities.

During the first month of the opening of school for the 1994-1995 school year, the writer approached several language arts department members and the high school's librarian to ask for their support and participation in the implementation of this practicum. The librarian, three colleagues from the department, and a colleague outside the writer's work site from another school district volunteered their aid and assistance to the project. Once the committee

was organized, several meetings were held to assess the language arts department and library's non-print media collections. The meetings covered several areas of concern. During the first sessions, the committee physically examined the collections, noting their size and existing conditions. During these early meetings discussions centered on the problems of staff access.

Subsequent meetings focused on the data the writer gleaned from the initial survey of the staff and his review of the literature. During these later meetings the committee defined non-print media for the high school, the patrons served by the collections, and the goals for managing the collections. These early decisions are reflected in the procedural manual for the high school (see Appendix L). The committee also decided on areas not to accomplish. They felt that the physical access, security, shelving, circulation, and scheduling of projection equipment were not major concerns and that the librarian and language arts department chair have adequately addressed these areas. Therefore, the committee did not make shelving nor circulation a primary focus of the committee. However, they considered the need for inclusion of clear ethical guidelines for complying with copyright and fair use laws a priority, and included this area in the procedural manual which, in turn, influenced their decisions on the content of the bibliographic information contained in the catalog.

Once these initial concerns were agreed upon, the committee felt that their primary focus should be to develop goals and objectives for systematically organizing the non-print media collections into a bibliographic catalog. After reading the writer's practicum proposal and further discussion and clarification, the committee decided early on that cataloging the bibliographic information

into a computer database was a quality solution that may solve many of the pressing needs of the teaching staff. They also felt that they had enough technical expertise in using computer technology and in their librarian skills to accomplish the task at hand. The committee reasoned that utilizing a computer database yielded several positive outcomes, including powerful access features a computer database provides in finding and searching for specific titles and key descriptors within the catalog's data fields; the ability of an appropriate software program that could print a book catalog in specific, specialized formats; the advocacy for the continued utilization of high technology to solve educational problems on-site by the teaching staff and, thereby, supporting the continued financial support for technology by the school and district; and the needed support in the teaching staff's efforts in constructing and delivering quality instruction that integrated a wide variety of media for the limited English proficient, Native American population they serve.

The committee had reservations, however, about the level of the staff's ability to effectively use a computer database. They believed the staff lacked computer skills and held reticence in using computers to solve everyday work problems. Many felt that the staff also lacked the forethought and ability to apply such a tool to their instructional work. Nevertheless, the committee used these concerns when designing the computer database and when they made suggestions for the writer's in-service workshop presented to the staff later in this implementation.

The committee, in a final early meeting, identified computer hardware and database software for the cataloging. Because of limited funding for the project, the members decided to use the Macintosh system 7.1 platform. The

department chair had access to several Macintosh computers within the department and similar computer hardware access with the Chapter I computer lab. The database software selected was the integrated package ClarisWorks 2.0 for the Macintosh. The district owned a site license for the software, which allowed the committee to use it freely for this project and could duplicate as needed throughout the school on the school's equipment. Many of the committee members had training and personal experience using the software and were more familiar with the graphical user interface of the Macintosh computer than other platforms available at the school. The choice of software and hardware also had the added benefit of costing the school district virtually nothing to catalog the non-print media in terms of additional technology for implementation.

The next phase of implementation dealt with two areas almost simultaneously—the training of committee members to operate the software package and the construction and design of a database to contain the bibliographic information. The writer discovered that all the committee members had utilized the word processing component of ClarisWorks 2.0, but never built a database before. The committee members decided that they needed training in how to operate the database portion of ClarisWorks. Also the committee was eager to identify and define the data fields and design the screen display of the database. In order to rectify the committee members' lack of knowledge and experience with database construction and capitalize on their willingness to start identifying bibliographic information which would be translated into data fields, the writer took the committee through rigorous training sessions that both included the operation *and* the construction of the

database for the non-print media collection.

First the committee identified the bibliographic information to be included in the database. They settled on ten separate fields of information. Each one helped to define and identify separate media titles contained in the collections. Also the bibliographic components addressed many of the committee's concerns about access. Each of the separate bibliographic components are described below, noting how each one contributed to the overall accessibility of the catalog.

Title. This bibliographic data field contained the complete title of the item cataloged. Since the teaching staff is familiar with an alphabetic organizational principle, the committee decided that the computer database would organize all entries alphabetically by title. They also decided that if a title began with the words a, an, or the, the title would be rewritten so that the articles would appear at the end of the title superseded by a comma. The writer instructed the committee that one of the bibliographic data fields needed a hierarchical organization for the computer database software to find and retrieve items from the database quickly and efficiently. Alphabetizing a database field was a built-in feature of the software that was easily executed. In furthering the accessibility of the database to those staff members who did not have a Macintosh computer in their classroom, the committee wanted the computer database to generate a book catalog organized alphabetically. Therefore, alphabetizing the titles of the non-print media entries became a desired outcome and a guiding organizational principle.

Collection. This bibliographic data field contained the name or title of the non-print media item if it was included in a larger package. The committee noticed that many of the video and audio recordings in the collections contained

more than one title or selection within the medium. Also the language arts department members on the committee wanted to be able to search and retrieve various audio recordings of poetry of a particular author or a particular poem on recordings that contained dozens of titles of various authors. Therefore, it was decided that each separate recording would be cataloged as individual entries into the database. The collection data field would catalog the title of the collected work or package that an individual entry might be contained within. This field also noted if a title belonged to a group of films purchased or recorded as a set of related recordings. For example, the video production, The Story of English, has five separate videocassettes to the package and on each video cassette two programs of the series are recorded for a total of ten separate titles within the package. In order to clarify this type of package, the collection data field would identify each program title as belonging to The Story of English and the number of the video cassette within the package set.

Type. This bibliographic data field identified the title's medium of recording. The committee wanted to let the patron of the database know what type of playback equipment was needed for the title. The types included in this field were VHS video cassettes, audio cassettes, lp (long playing) 33 1/3 rpm vinyl disk records, filmstrips, CD-ROM, and multimedia packages that included filmstrips and audio cassettes or lp records and filmstrips.

Length. This bibliographic data field noted the title's length of playback time. The committee wanted this included in the bibliographic entries so the teaching staff could readily integrate non-print media items into their lesson plans. They considered playback time a crucial piece of information for teachers when selecting items to include in their lessons.

Source. This bibliographic data field indicated whether the school purchased a title or whether a staff member duplicated the title from another source. The committee found many videotapes off-air duplications from the school's satellite link or from commercial cable television recorded off-air at teachers' homes. This field allows the managers of the collection to find and compile lists of titles that might violate copyright and fair use laws.

Format. This bibliographic data field gave the teachers more specific information about the title's recorded medium. The committee wanted the staff to know more detailed information about the format of the titles. This field, for example, notes if a videotape is in color, black and white, or subtitled in English if the film is in a foreign language. If a title is identified multimedia in the type field, then this field would yield more specific information about the various media the title is recorded onto. Again, the committee considered specific format information vital for teachers wishing to utilize a title within their lesson plans. They must know what type of equipment needed for proper playback of a title.

Date of Entry. This bibliographic data field contained the date in which the cataloger entered the bibliographic information on a particular title. The software package generated automatically the date of entry in the field. Each time a new entry is called for, the software calls up the current date from the static ROM (Read-Only Memory) of the Macintosh computer and places it into the data field. The committee considered this an important piece of information to include into the database. It would allow the librarian, for example, to have the software compile a supplemental listing of all the newly acquired films cataloged into the database for distribution to the teaching staff. It also proved useful in organizing the initial cataloging process, allowing the cataloging work force to keep abreast of what titles they cataloged on specific dates.

Location. This bibliographic field identified where physically a title was shelved and stored in the high school. Since the collections of non-print media resided in two physically different locations, the committee found it necessary to identify where patrons could go to obtain titles.

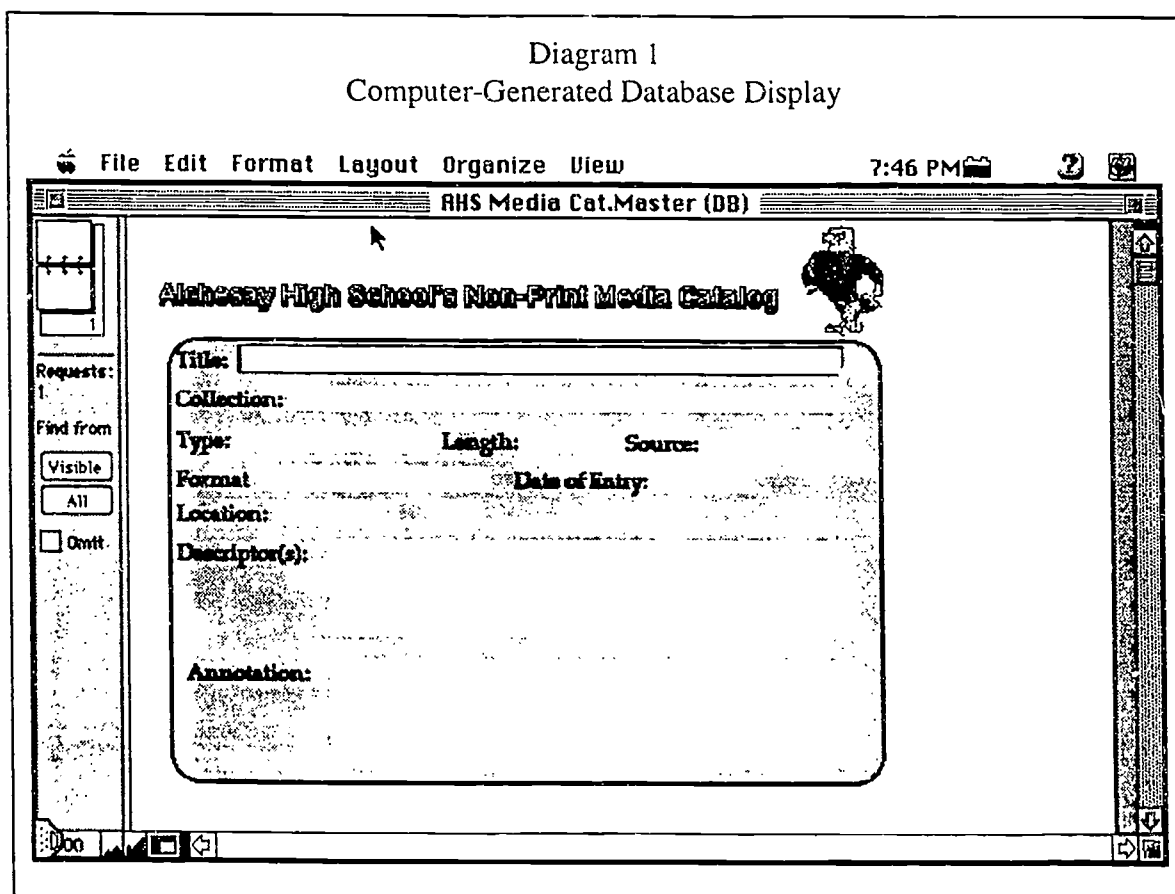
Descriptors. This bibliographic field contained key identifying words that described and identified the subject content of a particular title. The committee insisted that a multiple points of access by subject were needed in the database besides an alphabetical listing of the titles. They wanted power access to the collection. The database identified the subject content of titles through the use of a handful of key subject descriptors. This was the most optimal way of realizing power access. The computer software could locate and compile lists of titles that matched a particular key descriptor. For example, if the cataloging work force used the name of an author as a key descriptor, then a staff member could obtain a listing of all the titles dealing with William Shakespeare for their unit on *Romeo and Juliet*. This could be accomplished by the staff member executing a search of the descriptor field by having the computer search for matches to the descriptor "Shakespeare". The software would then address that field and compile a listing of all the bibliographic entries that contained that key descriptor. In order to consistently use similar key descriptors for like content of titles, it was necessary to organize and compile a thesaurus of descriptors for the cataloging process and for patrons using this feature of the database at a later date (see Appendix K). The field is not limited to only one descriptor, however. The committee designed this field to include several key descriptors. So the film *Romeo and Juliet* would contain in its key descriptor field not only the name of the author, "William Shakespeare" but would also contain key descriptors like "British literature," "literary adaptation," and "drama," for example.

Annotation. This bibliographic data field gave a short narrative of the content of the title and any distinguishing characteristics of the title or the package from which the title is derived. The committee considered this data field another critical component to include into the database for the teachers. They need to know quickly the content of a particular title for meeting curricular and lesson plan development. Including an annotation for each title was essential for power access to the database. The committee directed the cataloging work force to obtain this information from the title's packaging, teacher guides, and personal knowledge of the title's content. They also identified several vendor catalogs that contained many short annotations of the titles the collections contained.

Once the committee defined the bibliographic data fields, the writer demonstrated, modeled, and instructed the committee members on the operation and construction of a database with the software package, ClarisWorks 2.0. This allowed the committee an in-depth understanding of how the various features of the data fields interrelated and how the database could be accessed by various points of entry. As the committee learned the operation and construction of the database, it defined for them on a more practical level how cataloging would proceed and what types of information they wanted included into the data fields.

With a solid foundation of the operation of the software, the writer guided the committee through the process of designing the screen display. They set out a specific set of objectives for the display. The committee wanted all ten bibliographic data fields visible in one screen display and to take advantage of the color capabilities of the Macintosh system. They also wanted the display to contain a personalized design that identified it with the school and for the

display to be primarily user-friendly by having the design easily readable and all components labeled. Their efforts resulted in the screen display of Diagram 1 (see below). It contained all ten data fields. ClarisWorks 2.0 allowed each data field window to expand if the space was not large enough to contain visually all the bibliographic information and yet allowed the design to remain visible in one screen display. The figure printed here is in black and gray scale. Yet the actual screen display shows the rounded-corner box behind the title of the database in a pale yellow and the background box surrounding the data fields in a pale blue. The colors of the screen are the school's colors and the clip art of a proud falcon in the upper right-hand corner is the school's mascot. These aspects of the design successfully identified the database with the school. The design also



labels each of the data fields clearly and the data fields are a white box surrounded by a blue background. This design feature focuses the patron's eye toward the important information contained in the bibliographic entries. The screen display looks the same for each entry, giving it continuity like a template on which the software places the data information.

Once the committee constructed the database, designed the screen display, and gained training on how the database operated, they performed a preliminary cataloging session. This allowed committee members to experience in a simulation the actual data entry tasks. The members cataloged ten titles from the language arts department collection. The simulation helped them to further refine the data entry fields and begin the creation of the thesaurus of descriptors. It also defined for the committee the time commitment it would take to catalog a majority of the library and language arts department's collections. From this session the committee gained valuable first-hand experience and knowledge in the operation of the computer, the software package, and the accessibility their own screen design. The simulation session also focused the committee into establishing operational procedures for the data entry tasks and were written into the procedural manual (see Appendix L).

This experience narrowed the work force down to three members of the committee who further volunteered their time and newly-learned talents to the task of cataloging the non-print media collections. Since the work force was small, the writer found it unnecessary to develop cataloging training materials for them. Springboarding from their interest and enthusiasm for the project, the writer guided the cataloging task force into creating a schedule of cataloging sessions for the next few months.

As the cataloging proceeded, the task force first worked through the language arts department's collection and then cataloged the library's collection. During the cataloging process, several important developments occurred. The teaching staff needed access to the collection throughout the cataloging process. The task force did not want to disrupt as much as possible the collections' circulation. Therefore they needed a way to distinguish which titles they had cataloged. The task force solved this problem by purchasing small colored self-adhesive dots. When an item had been cataloged, the task force members would place a dot on the outside sleeve or packaging of the item and then returned to its shelving. The task force also decided to use distinguishing colored dots for the language arts department (green) and a different color dot for the library (blue). They also adhered a yellow cautionary dot to those items that possibly violated copyright and fair use laws for the convenience in managing this problem later with the collection.

As the cataloging proceeded, the catalogers defined and developed the thesaurus of descriptors. When they needed a new descriptor for the growing database, they would hand write the new item or items into a growing notebook that they shared while cataloging. The writer felt it was necessary to take the notebook listing of the descriptors and enter the descriptors into a separate database. The writer took this action for a couple of reasons. First it allowed the writer to organize the descriptors into an alphabetical list. The software made it possible to design the database so that it would alert the writer of any duplicate descriptors, thereby eliminating this possibility of error. And the database format provided the cataloging task force with a continually updated printed format for easy reference to the descriptors, thereby replacing a single notebook that the catalogers found hard to share.

After the cataloging task force conducted several cataloging sessions, the writer took the separate databases each catalogers worked on and merged them into one master file. This was performed several times during the cataloging stage. In order to accomplish this task, it was necessary to contact by phone the software company's technical support service to learn the procedural steps in merging separate databases.

When the cataloging task force completed the language arts department's collection and turned its attention to the library, the librarian provided the catalogers with a book listing of the video cassette films housed in the library. She had compiled these typed lists manually for the past three years. The catalogers used these collection listings as the basis for the preliminary entries of the library's collection into the database. Once the catalogers entered the library's listings, they then compared the actual shelf items with the title's bibliographic entries to verify and complete the bibliographic entries. The task force accomplished this by using the software's search and find feature in the database's title data field. When the catalogers found matching bibliographic entries to the shelf items, the entries were checked against the physical items for accuracy and completeness, filling in any missing information.

Once the task force completed cataloging both collections, the writer produced the thesaurus of descriptors booklet (see Appendix K). He accomplished this by generating a print out from the computer database, composing and adding a title page, and copying and binding several booklets for client use.

At this time the writer with the help of the cataloging team also produced the book catalog (see Appendices I and J). They executed this by first designing a

computer-generated print out from the database. The print out needed to include a header that contained the name of the document, the date of the print out (book catalogs age as the collection grows) and the numbering of the pages using the software's automatic pagination feature. Since a book catalog is static in its access, the titles were organized and listed in the book catalog alphabetically. For visual clarity each bibliographic entry was separated by a horizontal line. The cataloging task force decided that only seven of the ten descriptors were needed in the book catalog. They included the data fields of title, collection, annotation, location, length, type, and format. The fields of source, descriptors, and date of entry were only important in the computer generated database because they were useful only in how the software accessed these items. By leaving out some of the descriptors and most of the screen design elements, the writer found it possible to place seven bibliographic entries upon a single sheet of paper. This kept the book catalog within a reasonable document size for copying, binding and distribution purposes. The task force composed and included a title page that features the school mascot which again identified the document with the high school. The writer then composed and included a forward to the book catalog for the high school staff. The forward described and identified briefly the problem and solution this practicum addressed. It also described the various components in the book catalog and a short statement of usability of the book catalog. The cataloging team then compiled, printed, and bound several copies of the catalog book for distribution to the staff after their in-service workshop on the catalog database.

When the cataloging task force had finished creating the three major component of their labors—the computer database containing the bibliographic

information on the library and language arts department's non-print media collections, the thesaurus of descriptors that indexed the key subject descriptors in the descriptor data field, and the book catalog containing a listing of all the titles and some of their accompanying bibliographic data fields—the writer reassembled the original committee to examine the completed major components, conduct another computer simulation session to fine-tune the database catalog, and establish access procedures for the computer database. The committee simulated searching for several titles in the database and used the thesaurus of descriptors to locate groups of titles dealing with a specific content. They also examined the book catalog as well. No changes were deemed necessary in any of the major components at that time. The committee felt that the computer database accomplished the goals and objectives they set out for the project and this practicum. The writer and the committee reviewed the policy and procedural items they wanted to include in the procedural manual that would help manage in the future the computer database, the thesaurus of descriptors, the book catalog, and the non-print media collections themselves.

Next, the writer took the committee's suggestions and recommendation and wrote a procedural manual for the non-print media and its newly created bibliographic catalog (see Appendix L). The writer outlined the policies and procedures for the database, the collections, and the continued cataloging of the non-print media database. The document addressing the organization and staff access to the catalog and media collections. The committee reviewed this document and made revisions to its content. The writer took their comments and revised the document into its present form.

Now the entire staff could utilize the finished computer database and/or its cousin, the book catalog. In order to accomplish this next phase of the implementation, the writer developed in-service materials for a staff development workshop scheduled early in the school year with the high school's principal (see Appendix G). In writing the workshop booklet, the writer gave a brief background description of the problem and solution of this practicum. He outlined a set of objectives for the workshop that detailed what the participants could expect to learn and accomplish from the workshop. The workshop booklet outlined briefly the computer system requirements for the non-print catalog database, detailed how to launch the software program ClarisWorks 2.0, and open the catalog database file. A diagram of the database screen was included in the workshop booklet for clarity and utilization during the workshop's presentation. A listing of the various components in the screen display were given in the workshop booklet as well as a diagram of the screen display, pointing out the various data fields. The booklet concluded with a description of how to search the catalog using the find feature and key word search using the thesaurus of descriptors. A final paragraph states how the participants may sign-up to have the software and database installed on their classroom Macintosh computers or how to obtain a book catalog from the writer.

Once the in-service materials were developed for the workshop, the writer was ready to conduct the in-service to train teachers to access the database and its integrated use in material selections for ESL instruction. The staff received a memorandum from the high school's principal (see Appendix C) calling for their voluntary attendance to the writer's workshop. It also noted the date, time, and place of the workshop as well. The writer also invited the staff to the catalog

workshop with a letter of invitation (see Appendix D). Seventeen district employees attended the workshop (see Appendix E). The workshop was held in the high school's Chapter 1 computer lab which contained 30 Macintosh computers. The writer installed ClarisWorks 2.0 and the database file on each computer previous to the workshop. The writer conducted the presentation of the workshop. He gave each participant a workshop booklet (Appendix G) and seated them at a computer station. He described verbally the purpose of the workshop, a description of the problem and the solution derived. The writer briefly outlined the computer system requirements. The writer then took the group through a guided practice and demonstration session. They learned how to launch ClarisWorks 2.0 and open the database file. The writer described the screen display and its various data fields. The participants learned how to scroll through the data entries and use the mouse to navigate through the software's features. The writer then demonstrated how to search the database for a particular title or key work. The participants played a game of speed and skill in correctly locating bibliographic entries, playing for inexpensive food and beverage prizes. Then writer distributed to the participants the thesaurus of descriptors booklets. He explained how to use the booklet in conjunction with the computer database. Then the participants played a second game of locating groups of bibliographic entries for particular key descriptors. The writer devised the participatory games as part of his preparation for the workshop. In closing, the writer asked interested participants to sign-up for having either ClarisWorks 2.0 and the database file installed on their classroom computer or having a copy of the book catalog distributed to them (see Appendix F). At the conclusion of the formal presentation, the writer allowed the participants time to explore the

database further and to ask personal questions of the writer about the database and the accompanying software. The workshop took approximately seventy minutes to complete.

After the completion of the workshop, the writer, with the assistance of the committee members, distributed bound copies of the book catalog to those staff members who requested one from the workshop. A cover letter for distribution was included with each book catalog (see Appendix H). The writer went to the classrooms of the staff members requesting the computer database and installed the software ClarisWorks 2.0 (if needed) and the database file. Upon installation of the database file, the writer locked the file so that no one could modify the database. When additional items will be included in the database, the writer will remove the old database and install a fresh copy of the update file. The staff members who received the computer database installed on their classroom computers also received a copy of the thesaurus of descriptors to facilitate their access to the database. Further, the writer thanked the faculty who participated in the in-service workshop and announced to the rest of the staff that he would install on their classroom computer the necessary software and database file or provide them with a bound book catalog on an at-request basis. Eight staff members received the database on their classroom computers and twelve staff members were distributed the bound book catalog.

When computer installation occurred, an unexpected problem arose. The screen display became unreadable when installed on a monochrome computer. In order to rectify this minor problem, the writer changed the color backgrounds of yellow and blue to gray scale in order for the screen display to be readable. He performed this change for only one of the teacher's computers at the high school.

At the conclusion of the practicum implementation and when sufficient time had elapsed for the high school staff to utilize the computer and book catalog, the writer distributed a post survey with an accompanying cover letter to the high school staff (see Appendix B). The writer distributed forty surveys and the staff returned nineteen. The survey once again asked for the staff's perceptions of the accessibility, level or organization, utilization, and management of the non-print media collections in the library and language arts department. The results and analysis of this survey are discussed below.

Finally, the bound book catalog and accompanying cover letter (see Appendices H, I, and J) were distributed to the superintendent of instruction and to the other principals and librarians at the other elementary and middle schools within the district as a way of disseminating the fruits of this practicum implementation.

CHAPTER V

RESULTS, DISCUSSION, AND RECOMMENDATIONS

Results

This practicum attempted to address the inadequate levels of organization caused by insufficient leadership and management of the library and language arts department's non-print media collections at the writer's work site: a high school located in the Southwest of the United States on a major Indian reservation. The collections needed complete bibliographic cataloging in order to help and assist the teaching staff in accessing the non-print media collections for supplementing the classroom instruction on a timely basis. As a result of the inadequate cataloging of the collections, the staff has been underutilizing this resource, wasting precious financial resources by purchasing duplicate titles, and possibly violating copyright and fair use laws in keeping suspect items within the collections.

In order to rectify this problem, it was expected of this practicum that the non-print media collections would be better managed by applying leadership to the situation and initiating an effort at the writer's work site to involve a small committee of educators to catalog both the library and language arts department's non-print media collections. The primary result of this practicum was the invention of a computer database that allowed committee members to effectively catalog the non-print media collections. This was accomplished.

Through participation in a training workshop and distribution of the computer database and its derived book catalog, the high school staff adopted

the computer databased bibliographic cataloging system as an effective tool to help access and utilize the collections in their ESL curriculum designs and instructional delivery. This, too, accomplished a major expectation of this practicum.

Once the high school staff had opportunities to utilize the collection's bibliographic catalog through the in-service workshop and on their own, the staff showed greater use of the non-print media in supporting their ESL instruction. They showed this by a positive move on a post survey of their perceived use from a mean Likert scale response of 2.00, representing "monthly" use to a mean response of 2.81, representing use greater than on a monthly basis (see Table 2 and Table 3). This exceeded the anticipated outcome by a positive gain of 0.31 (see Table 4).

The staff also found the non-print media more accessible once the collections were cataloged and the staff had opportunities to take advantage of this organization. This was shown by a positive move on the post survey of their perceived accessibility of the media collection from a mean Likert scale response of 3.62, representing that their access efforts to be "somewhat difficult" to "reasonably easy" to a mean response of 4.14, representing a "reasonably easy" to "extremely easy" accessibility (Table 2 and Table 3). This exceeded the anticipated outcome by a positive gain of 0.14 (see Table 4).

Likewise, the high school staff found the non-print media better organized at the conclusion of this practicum's implementation, showing that they felt that their efforts at retrieving titles for use in their classroom instruction to be easier. The staff showed this by a positive move on the post survey of their perceived organization of the media collection from a mean Likert scale response of 3.10,

representing that the collection was "organized" to a mean response of 4.06, representing a perception that the collection is now "reasonably well organized" (Table 2 and Table 3). This exceeded the anticipated outcome by a positive gain of 0.56 (see Table 4).

And the post survey showed that the high school staff did utilize the non-print media more frequently. Because of its improved management and organization, the staff noticed that the collection did meet their instructional needs more effectively. This was shown by a positive gain on a post survey from a mean Likert scale response of 3.24, representing that the collection adequately meets instructional needs, to a mean response of 4.03, representing a perception that the collection is reasonably meeting their instructional needs (Table 2 and Table 3). This exceeded the anticipated outcome by a positive gain of 0.28 (see Table 4).

Table 2

Results of the Post Survey of Organization and Use of the Non-Print Media

| Area of perception | mean response |
|-----------------------------|---------------|
| accessibility | 4.14 |
| organization | 4.06 |
| utilization | 2.81 |
| meeting instructional needs | 4.03 |

Table 3

Comparison of Pre and Post Survey Results of Staff's Perceptions

| Area of perception | Pre Survey mean response | Post Survey mean response | Difference |
|-----------------------------|-----------------------------|------------------------------|------------|
| accessibility | 3.62 | 4.14 | 0.52 |
| organization | 3.10 | 4.06 | 0.96 |
| utilization | 2.00 | 2.81 | 0.81 |
| meeting instructional needs | 3.24 | 4.03 | 0.79 |

Table 4

Comparison of Anticipated and Actual Outcomes of Survey Results

| Area of perception | Anticipated mean response | Actual mean response | Difference |
|-----------------------------|------------------------------|-------------------------|------------|
| accessibility | 4.00 | 4.14 | 0.14 |
| organization | 3.50 | 4.06 | 0.56 |
| utilization | 2.50 | 2.81 | 0.31 |
| meeting instructional needs | 3.75 | 4.03 | 0.28 |

The standard of achievement of this practicum was the cataloging of ninety-eight percent of the high school's library and language arts department's non-print media collection using some form of a computer database. At the conclusion of this practicum, the task force cataloged one hundred percent of the library and language arts department's non-print media titles in the two collections. The team cataloged 501 separate titles in the library and 1,027 separate titles in the language arts department for a total of 1,528 entries in the computer catalog database for the two collections. The standard of achievement for this outcome was met and exceeded.

Another standard of achievement was the writing of a procedural manual outlining the cataloging and managerial policies and procedures and the publication in booklet form of the computer database catalog distributed to one hundred percent of the staff. The committee and the writer wrote and produced a procedural manual that outlined the managerial policies and procedures for the non-print media collections (see Appendix L). Copies of the manual were placed in the hands of the librarian and the language arts department chair. The documents will be used as management resources for the collections in subsequent years. The cataloging task force and the writer successfully created a book form of the computer database catalog (see Appendix J). The book was copied and bound. It was not, however, distributed to every staff member at the high school because the prohibitive cost of duplicating a 221 page document. A more reasonable alternative was to distribute the book catalog to those staff members who attended the in-service workshop and requested a copy of the book catalog (see Appendix F). Twelve staff members asked for and received the book catalog. The writer also distributed a copy to each committee member, the

superintendent of instruction for the school district, three other principals within the school district, and to the librarian at three other schools in the district. A total of twenty-three copies were distributed widely throughout the high school and within the school district.

The attendance and participation of sixty percent of the high school faculty at a staff in-service that would train the staff on the access and use of the computer database catalog was another standard of achievement for this practicum. Forty teachers comprise the teaching staff of the high school. Seventeen teachers actually attended the in-service workshop, or forty-three percent of the high school faculty. This standard was not met. Because attendance at the workshop was voluntary and concurrent workshops were held for some high school departments, the writer speculated these to be the reasons for unexpected low attendance to the workshop.

The final measurements of achievement for this practicum prescribed the installation of the computer database catalog on six computers in the high school, and a response of fifty percent of the staff on a post-survey that would demonstrate positive gains in greater utilization, organization, and access of the non-print media collections. Nine Macintosh computers at the high school received the installation of the non-print media catalog database, which met and exceeded expectations. The writer received nineteen post-surveys returned to him from the teaching staff. He distributed forty surveys, which was forty-eight percent return. This was nearly a fifty percent return which met this measure of achievement.

Discussion

The results of this practicum strongly demonstrated that better management and organization of a non-print media collection can be achieved when a team of educators apply their effort and expertise with sufficient time and technological support to the problem. There are efficient ways of organizing a collection of non-print media so that teachers can access them more easily. At the heart of this organization was the importance of providing a bibliographic catalog of the titles that included pertinent information that they felt was valuable to help their curriculum and lesson planning efforts.

The key to the success of the accessibility of the bibliographic information was its placement on a computer database. The practicum demonstrated how vital the utilization of technology was in the cataloging process. It allowed the cataloging task force to enter over 1,500 separate titles within a time span of a few months. One cataloger estimated that he could enter about 15 titles an hour. The work force generally accepted this as an accurate speed for the work. In other words, the use of a computer database dramatically increased the speed and efficiency of the cataloging process.

The the increased leadership and management applied to the non-print media collections created several profound changes in the high school. The implementation of this practicum changed the attitudes of the librarian and several teachers about the importance of utilizing non-print media in instruction. By accessing the database or serving on the cataloging work force, many staff members arrived at a new-found respect for the depth and variety of the non-print media collections that have been amassed over the last several years. They had found titles within the collections they had no knowledge of and related to

the writer that they were going to utilize them immediately within their lesson plan. The librarian took a more proactive role towards her collection of films. She implemented more systematic shelving procedures for the library's non-print media and reported to the writer that since the staff had access to the computer database and the book collection, the non-print media circulation increased.

Another direct result of this practicum's implementation has been the desire of other departments in the high school to have their non-print media cataloged on the database as well. The nursing/health department and the home economics department both approached the librarian and the writer to have their non-print media holdings cataloged. This was accomplished. These departments had many important titles on health, safety, drug education, and self-esteem that the entire staff could gain access to and benefit from in their lesson planning efforts. The staff's overall behavior showed a renewed interest and value place upon the school's non-print media supplemental materials now that true tools of accessibility are available. The need for a quality infrastructure to facilitate access has been proved and provided.

As VanWyck (1976) observed, many educators not only hold a resistance to innovation both in the use of non-print media to supplement and enhance their instructional efforts, but also the use of technology to solve educational problems they face. This practicum's implementation process broke down this barrier for some teachers at the high school. Many participants at the writer's in-service workshop had never used a computer and/or a computer-generated database before. For some, this was a major step in their acceptance and possible use of high technology to the educational work setting. The practicum implementation also provided needed training for the staff in the operation and application of technology to instruction.

In considering the staff's prior knowledge, training, and skill in using computer technology, the committee who helped implement this practicum analyzed very carefully the high school teachers when designing and constructing the non-print media's computer database. The bibliographic information contained in the CRT's screen design held just the right amount of information useful for the staff in gainfully accessing to the collections. When the writer observed staff members actually operating and utilizing the database during the in-service workshop, the simulation exercises, and in help sessions with staff member near the end of this implementation, he noticed the staff members were able to manipulate the functions of the software and the built-in design features of the database with little difficulty. The staff found the organization of the database understandable. Standard cataloging formats advocated by the literature would have been too cumbersome and were, in fact, unnecessary. The committee selected and defined bibliographic data fields themselves that gave the teachers a user-friendly computer interface that did not impede their quest for supplemental materials to enhance their lesson planning efforts.

Another successful aspect of the computer-generated database and its infrastructure was the thesaurus of descriptors and the accompanying descriptor data field. It turned out to be an effective way of organizing the subject content of the non-print media collections as advocated by Inter (1984), Means (1985), and Kranch (1991). The teaching staff found this design feature of the database a useful aid in searching for subject topics within the collection. Many teachers discovered titles they did not personally know existed within the collections. Their successful access came about because the committee took the literature's

recommendation to incorporate a descriptor data field feature, constructed it into the database, and published the alphabetical thesaurus of subject descriptors.

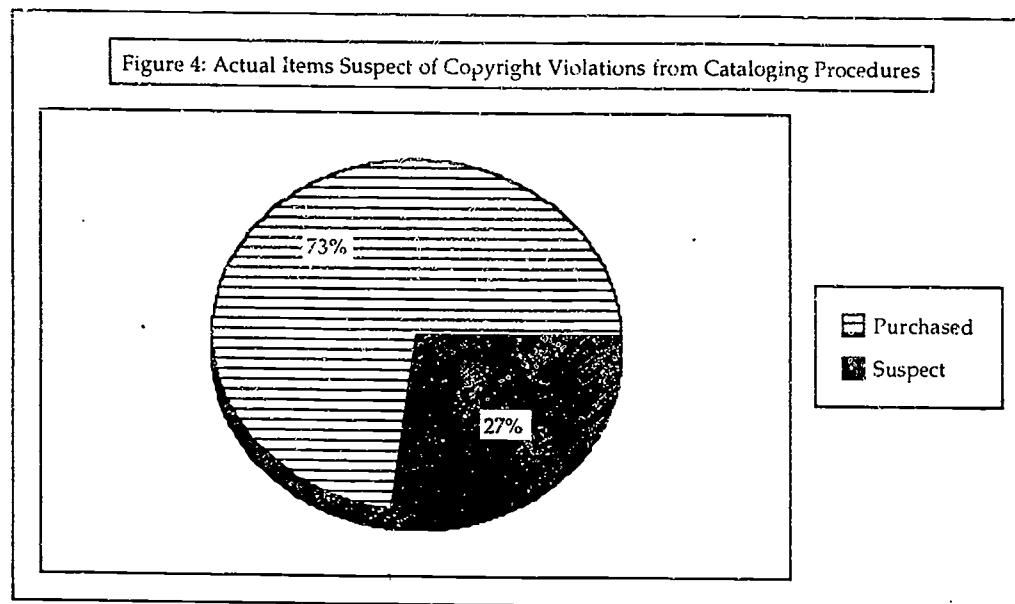
The inclusion of the book catalog format for distribution was another successful feature of this practicum's solutions. It allowed many staff members access to the database who did not have a computer within their classroom. Although it lacked the subject heading data field, its alphabetical title organization and sufficient bibliographical information gave it adequate access for many staff members. For the first time, the high school had bibliographic information on the many films, filmstrips, and multimedia packages in the hands of the teachers who could utilize the resources of the two collections.

The summary or annotation data field was also a significant aid to the accessibility of the non-print media collections as Inter (1984), Olson (1985), Daily (1986), and Flanders (1993) recommended. During the in-service workshop, many teachers commented to the writer that the inclusion of a short summary of the title was an invaluable resource. They could extract from the database useful information that allowed them to more easily select appropriate titles from a group of similar subject content titles through the annotations. This field also prompted many staff members to state that previewing of media titles was an important but time consuming part of their lesson planning, and that the summaries contained in the database cut down on the time necessary to actually preview titles before showing them to their classes.

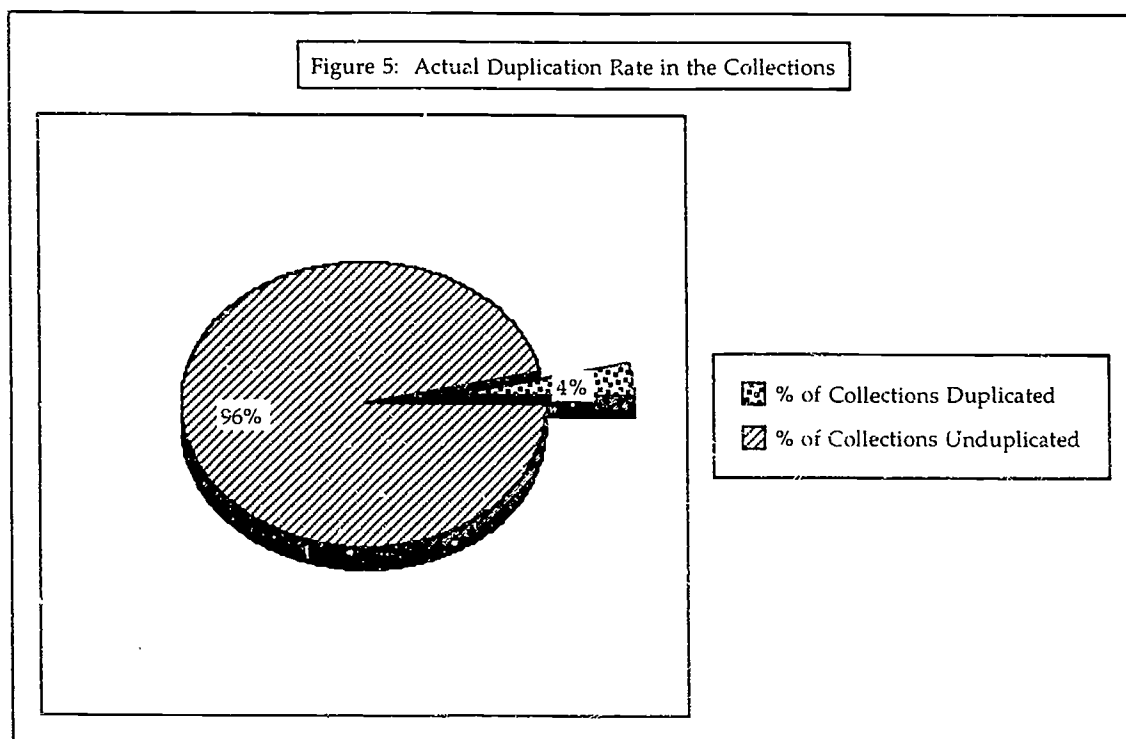
The purpose of the non-print media collections as stated earlier was to supplement and enhance the English language instruction of the entire staff. Since the school has a large LEP population, the district mandated that every teacher must be responsible for delivering ESL instruction to all students in all

content areas. The literature advocated the utilization of non-print media to increase the comprehensibility of the content of instruction as well as promoting the listening and reading of English. This implementation positively affected the ESL instructional delivery of the high school by allowing the teachers better and more reasonable access to the non-print media, and thereby having this resource offered more in the school's overall instructional delivery. This increased utilization of the non-print media has made an impact on the ESL instruction of the school.

Another consideration has been the increased awareness of the staff on the ethical issues surrounding non-print media collections. The committee who worked on the implementation of this practicum were surprised to discover that the two collections cataloged contained 429 titles not purchased by the district and were suspected of violating copyright laws. This represented twenty-one percent of the collections cataloged (see Figure 4). The writer's preliminary inspection of the collections showed thirty-seven percent of the collection suspect. By cataloging the collections and including a field that identified how the collection obtained the title, the committee was able to determine how large a problem they had. The problem of copyright violation is serious, but not as severe as originally suspected (see figure 2). The writer has observed great reluctance among the staff members to erase audio and video recordings that do not comply with fair copyright use. This being the case, the procedure manual reflects this and suggests that if titles do violate fair use laws, that the department make every effort to replace these items with purchased copies or explore the purchase of licenses for the titles.



Finally, the cataloging process allowed the committee to examine how much duplication existed between the two collections. Initially the writer projected a figure of twelve percent of the titles in the language arts department duplicated the titles of the library's collection of non-print media (see Figure 3). In actually examining the duplication of titles through the use of the alphabetical listing features of the titles by the database software, the cataloging committee determined the problem to be not as serious as first suspected. Less than four percent of the titles between the collections are duplicated (see Figure 5). The procedural manual suggested that before a non-print media title is considered for purchasing, that the database be consulted to make sure no further duplication is permitted.



Recommendations

The strategies used to affect changes in the management and organization of the non-print media collections proved to be effective during this practicum's implementation. The writer recommends and advocates schools to continually upgrade and organize their collections of supplementary, instructional materials. The writer's high school is no exception. Since the non-print media of the library was successfully cataloged onto a computer data base, it is recommended that the entire library's bibliographic information contained in its card catalog be automated. For a moderate fee, specialized vendors will take a school's shelf list and convert it to a computerized based system that would incorporate many tasks of circulation. This level of organization and use of technology has not occurred at the high school and needs to be installed so that both staff and

students could gain greater accessibility to the library's collections. This would also support a widening utilization of technology throughout the school, including student participation. All schools should implement technological resources to catalog their library's holdings. It is possible to manually complete the task with a small number of staff members dedicated to such a task if the collection is relatively small. Otherwise, outside technical expertise should be sought and paid for to increase the access and utilization of any school's library holdings.

It is further recommended that the high school examine other administrative and instructional infrastructures that might benefit from greater management and organization using technological resources. This practicum has demonstrated the successful application of technology to a managerial problem. Other areas such as attendance, financial recordkeeping, gradekeeping and reporting, and other managerial functions could be better organized and accessed through the use of computer systems.

During this practicum's implementation process, the writer successfully trained several teachers in how to use and apply technology to their work responsibilities. The writer's school needs to provide additional training for the staff in order for them to utilize more effectively the high technology now in their work setting, and to prepare them for what is ahead. The writer was surprised at the lack of technical skill the teaching staff had with computers. And if this high school is comparable to other schools in this state and around the nation, a more concerted effort must take place in the nation's public schools to eliminate the barriers that are blocking schools from utilizing computers as a "central tool for communicating and creating knowledge" as Merrow (1995) argued. Teachers

need the necessary knowledge and experience with high technology in order to apply the tool to their administrative *and* instructional work.

Dissemination

As part of this practicum's implementation, a dissemination of the computer-generated catalog database was achieved. The writer distributed the book catalog to several teachers, the assistant principal, and principal of the high school; the Superintendent of Instruction for the school district; the other three campus principals at their February, 1995, Principals' meeting; and to the librarians of the other school campuses within the district. The writer also disseminated the computer database document by installing the database on the computers of nine staff members at the high school.

Copies of this practicum report will be distributed to the school district's administrators, the superintendent of Instruction, the Federal Projects Director, the Special Education Director, the Technology Coordinator, the language arts department members, and the other members of the implementation committee. A summary of the procedures and finding will be submitted to the school board for their review.

If time permits, this report may be adapted for presentation at conferences on a local and national level. On the local level, the Arizona Teachers of English as a Second or Other Languages (AZ-TESOL), the Apache/Navajo County Information Network (ANCIN), and the Arizona State Library Association might be very interested in a presentation of this practicum. On the national level, the writer may present this practicum at the national convention of the Association for Educational Communications and Technology and for the Southwest Education and Technology Conference.

This practicum could also be condensed and rewritten for several professional publications which may include Tech Trends, the magazine of the Association for Educational Communications and Technology, Technological Horizons in Education Journal (T.H.E. Journal), Electronic Learning, School Library Media Quarterly, and Library Journal.

REFERENCES

- Baker, P. (1985, Summer). Adoption of a computer software cataloging system at an elementary school. School Library Media Quarterly, pp. 208-214.
- Bitter, G., and Yohe, R. (1989, March). Preparing teachers for the information age. Educational Technology, pp. 22-25.
- Bruder, I. (1989, January/February). Future Teachers: Are they prepared? Electronic Learning, 8(5), pp. 32-39.
- Buchsbaum, H. (1992, April). Portrait of a staff development program. Electronic Learning, 11(7), pp. 18-27.
- Burton, P. & Petrie, J. (1991). Information management technology: A librarian's guide. London: Chapman and Hall.
- Daily, J. (1986). Organizing nonprint materials. New York: Marcel Dekker, Inc.
- Epstein, S. (1990, May). Retrospective conversion revisited, Part I. Library Journal, 115(9), pp. 56-58.
- Estes, B. (1986). Procedures manual for school library media centers, revised. Oklahoma City, OK: Oklahoma State Department of Education.
- Finkel, L. (1990). Moving your district toward technology. The School Administrator Special Issue: Computer Technology Report, pp. 35-38.
- Fischer, D., Bragiel, M., Wise, E., & Reidhead, C. (1990, June). Cumulative file review and recommendations report for the ESL programs. Whiteriver, AZ: Whiteriver Unified School District #20.
- Fischer, D., Johnson, T., Reidhead, C., & Braverman, F. (1992, June). The 1992 cumulative file review for the ESL programs. Whiteriver, AZ: Whiteriver Unified School District #20.

Flanders, D. (1993, October). Sort, search, find, win! How to develop and organize an active database for Cable in the Classroom programming. Cable in the Classroom, 3(9), 12-13.

Friderichsen, B. (1986). Sources for selecting school library resource materials, 1986. Edmonton, Alberta, Canada: Media and Technology Branch, Alberta Department of Education.

Gotanda, M. (1984, July). Public library automation report: 1984. Honolulu, HI: Hawaii State Department of Education, Honolulu, Office of Library Services.

Graham, P. (1985, Summer). Current developments in audiovisual cataloging. Library Trends, 34(1). pp. 55-56.

Gregor, D., & Mandel, C. (1991, April). Cataloging must change. Library Journal, 116(6), pp. 42-47.

Hawkins, J. (1994). Cultural changes: Designing technology for professional development. Electronic Learning, 13(4), 10-11.

Heaton, J. (1979). An audiovisual method for ESL. In M. Celce-Murcia and L. McIntosh (Ed.), Teaching English as a second or foreign language (pp. 178-205). Rowley, MA: Newbury House Publishers, Inc.

Heidenreich, C. (1986). Social studies and the Native American. In J. Reyhner, (Ed.), Teaching the Indian child: A bilingual/multicultural approach (pp. 79). Eastern Montana College.

Hirschbuhl, J. (1990). Is there a corporate training strategy in education's future? Learning International, 6. pp. 169-172.

Hutchison, J. (1978). Comprehensive educational plan White Mountain Apache tribe. Whiteriver, AZ: White Mountain Apache Tribe.

Inter, S. (1984). Access to media: A guide to integrating and computerizing catalogs. New York: Neal-Schuman Publishers, Inc.

Inter, S. (1987, August). Interfaces: Bibliographic policies. Technicalities, Z(8), pp. 3-6.

Johnson, B. (1987). How to acquire legal copies of video programs (3rd Ed.). San Diego, CA: Video Resources Enterprise.

Kranch, D. (1991). Automated media management systems. New York: Neal-Schuman Publishers, Inc.

Lee, H. (1989). Trends in automation in American academic libraries: Ohio University's experience. Bangkok, Thailand: Paper presented at the Pacific Conference on New Information Technologies for Library and Information Professionals, June 16-17, 1987.

Lewis, S. (1985). Nonprint materials in the small library. Library Resources and Technical Services, 29(2), 145-150.

Means, B. (1985). Thesaurus of educational nonprint terms. Norwich, NY: Media Librarian of the Delaware-Chenango BOCES.

Merrow, J. (1995). Four million computers can be wrong. Education Week, 24(27), pp. 52, 38.

Miller, J. (1988). Using copyrighted videocassettes in classrooms, libraries, and training centers (2nd Ed.). Friday harbor, WA: Copyright Information Services.

Miller, R., and Terwillegar, J. (1983). Commonsense cataloging: A cataloger's manual (3rd ed.). New York: The H. W. Wilson Company.

Montgomery, P. (1992). Integrating library, media, research, and information skills. Phi Delta Kappan, 73(7), pp. 529-532.

Moore, S. (1984). Unraveling the patchwork: Procedures manual for rural Montana schools. Dillon, MT: Montana Rural Education Center, Education Office, Western Montana College.

Nelson, M. (1990). Crunching knowledge: The coming environment for the information specialist. In N. Nelson (Ed.), Technology for the '90's: Microcomputers in libraries (pp. 20-25). Westport, CT: Meckler Corporation.

Olson, N. (1985). Cataloging of audiovisual materials: A manual based on AACR 2 (2nd Ed.). Mankato, MN: Minnesota Scholarly Press.

Ovando, C., & Collier, V. (1985). Bilingual and ESL classrooms: Teaching in multicultural contexts. New York; McGraw-Hill Book Company.

Pearce, D. (1986). Improving comprehension of Indian students. In J. Reyhner, (Ed.), Teaching the Indian child: A bilingual/multicultural approach (pp. 112-135). Eastern Montana College.

Peters, P. (Ed.). (1985). Command language and screen displays for public online systems. (Report of a meeting sponsored by the Council on Library Resources, March 29-30, 1984, Dublin, Ohio). Washington, D.C.: Council on Library Resources, Inc.

Phoenix Union High School District No. 210. (1991, June). English as a second language guidelines for curriculum. Phoenix, AZ: Author.

Potter, W. (1990). Emerging online catalogs: Tomorrow's revolutionary tools. In N. Nelson (Ed.), Technology for the '90's: Microcomputers in libraries (pp. 1-8). Westport, CT: Meckler Corporation.

Public Broadcasting Services (1989). Copyright: Staying within the law: A resource guide for educators. Alexandria, VA: Author.

Reed, M. (1987). The copyright primer for librarians and educators. Chicago, IL: American Library Association and the National Education Association.

Reilly, T. (1990). ESL through content-area instruction. In Arizona Department of Education (1990), Strategies for teaching limited English proficient students: Content area strategies, part II (pp. 15-26). Phoenix, AZ: Author.

Rogers, J. (1982). Nonprint cataloging for multimedia collections. Littleton, CO: Libraries Unlimited, Inc.

Scrogan, L. (1989, January). The OTA report: Teachers, training, and technology. Classroom Computer Learning. pp. 80-85.

Silver, B. (1987, July). Opening access to the University of California libraries. Auburn, AL: paper presented at the International Conference on Data Bases in the Humanities and Social Sciences.

Sinofsky, E. (1987). Copyright handbook for film, video, and multi-image production. Friday Harbor, WA: Copyright Information Services.

Sivin, J. & Bialo, E. (1992, May). Ethical use of information technologies in education: Important issues for America's schools. Washington, DC: Department of Justice, Washington, D.C. national Institute of Justice, Office of Educational Research and Improvement.

Sowers, C. (1994, April 6). Suicide stalks Fort Apache. The Arizona Republic.

Teach, B. (1985, Summer). Media networking in academic institutions. Library Trends, 34(1). pp. 67-78.

Sturdivant, P. (1989, March). Technology training: Some lessons can be learned. Educational Technology. pp. 31-35.

Triche, C. (1993, June). Video in the schools: An evolutionary view. Wilson Library Bulletin, pp. 39-40.

VanWyck, W. F. (1976). Reducing teaching resistance to innovation—an updated perspective. In P. J. Sleeman and D. M. Rockwell (Eds.), Instructional media and technology: A professional's resource (pp. 292-315). Stroudsburg, PA: Dowden, Hutchinson & Ross.

Vermont State Department of Education (1981). A library media guide for Vermont schools. Washington, DC: Department of Education, Montpelier, Division of Federal Assistance.

Voegel, G. (1986, Fall). Copyrights revisited. In G. H. Voegel (Ed.), Advances in instructional technology (pp. 41-48). San Francisco, CA: New Directions for Community Colleges, No. 55.

Williams, L. (1983). Teaching for the two-sided mind. New York: Simon & Schuster, Inc.

Appendix A
Pre-Survey of Staff

Survey of Organization and Use of the Non-Print Media, Alchesay High School
April 20-21, 1994

Directions: Below is a survey for the teaching staff of Alchesay High School to complete. It deals with your use and your perceived organization of the non-print media of the high school library and the language arts department. Non-print media includes videotape cassettes, audio cassettes, filmstrips, and multi-media packages that contain a variety of these. Please circle the number of your response to each prompt. Do not write your name on the survey. Please return it by placing it in Fischer's box. Thank you!!

**Language Arts Department's Non Print
Media Collection**

A. In supporting my instruction, I

have used / never used
(circle one)

the language arts department's non print media collection.

If you marked "never used" in A above, continue with the second column of answers. If you marked "used" in A above, go on to items B - G.

B. In supporting my instruction on the average I use the non-print media in the language arts department:

- 5 - more than once-a-week
- 4 - once-a-week
- 3 - biweekly
- 2 - monthly
- 1 - a couple of times a semester

C. When I do use the non-print media in the language arts department, overall I find the organization of the collection:

- 5 - exceptionally well organized
- 4 - reasonably well organized
- 3 - organized
- 2 - somewhat disorganized
- 1 - totally disorganized

Please continue on the next page in the first column. 87

Library's Non Print Media Collection

G. In supporting my instruction, I

have used / never used
(circle one)

the library's non print media collection.

If you marked "never used" in G above, you are finished with this survey. Please turn it in to Mr. Fischer's box.

If you marked "used" in G above, go on to items H - L.

H. In supporting my instruction on the average I use the non-print media in the library:

- 5 - more than once-a-week
- 4 - once-a-week
- 3 - biweekly
- 2 - monthly
- 1 - a couple of times a semester

I. When I do use the non-print media in the library, overall I find the organization of the collection:

- 5 - exceptionally well organized
- 4 - reasonably well organized
- 3 - organized
- 2 - somewhat disorganized
- 1 - totally disorganized

Please continue on the next page in the second column.

D. When I am trying to identify materials that fall within a specific topic area, I find my efforts at accessing the non-print media in the language arts department

- 5 - extremely easy
- 4 - reasonably easy
- 3 - somewhat difficult
- 2 - moderately difficult
- 1 - extremely difficult

E. When I examine the non-print media collection in the language arts department, I find the collection to be meeting my instructional needs

- 5 - extremely well: materials frequently meet my needs.
- 4 - reasonably well: materials meet my teaching needs
- 3 - adequately: sometimes materials meet my needs
- 2 - inadequately: materials infrequently meet my needs
- 1 - extremely inadequately: rarely meets my instructional needs

F. When I am requested to provide input into the selection and purchasing of new non print media for the language arts department collection, I offer my input to the department chair:

- 5 - frequently
- 4 - often
- 3 - sometimes
- 2 - infrequently
- 1 - rarely

Thank you! Please go on to the second column on the first page for additional responses.

J. When I am trying to identify materials that fall within a specific topic area, I find my efforts at accessing the non-print media in the library:

- 5 - extremely easy
- 4 - reasonably easy
- 3 - somewhat difficult
- 2 - moderately difficult
- 1 - extremely difficult

K. When I examine the non-print media collection in the library, I find the collection to be meeting my instructional needs:

- 5 - extremely well: materials frequently meet my needs.
- 4 - reasonably well: materials meet my needs
- 3 - adequately: sometimes materials meet my needs
- 2 - inadequately: materials infrequently meet my needs
- 1 - extremely inadequately: rarely meets my instructional needs

L. When I am requested to provide input into the selection and purchasing of new non print media for the language arts department collection, I offer my input to the librarian:

- 5 - frequently
- 4 - often
- 3 - sometimes
- 2 - infrequently
- 1 - rarely

Thank you for your observations!! Please return this survey to Mr. Fischer's box.

Appendix B
Cover Letter and Post Survey of Staff

MEMORANDUM

To: AHS Staff
From: David Fischer
Date: March 13, 1995
Subject: Completion of the attached post-survey

Attached you will find a post-survey dealing with the non-print media collection contained in the library and the language arts department. I am gathering data to see if there are any changes regarding the organization and use of these collections since the introduction of the non-print media computer catalog. This work is for my doctoral study's major practicum. I would appreciate your *honest* and *immediate* responses.

Please complete the survey and put it in my box by Friday, March 15th. Thank you!!

Post-Survey of the Organization and Use of the Non-Print Media
Alchesay High School
March, 1995

Directions: Below is a survey for the teaching staff of Alchesay High School to complete. It deals with your use and your perceived organization of the non-print media of the high school library and the language arts department since the introduction of the non-print media computer catalog. Non-print media includes videotape cassettes, audio cassettes, filmstrips, and multi-media packages that contain a variety of these. Please circle the number of your response to each prompt. Do not write your name on the survey. Please return it by placing it in Fischer's box. Thank you!!

**Language Arts Department's Non Print
Media Collection**

A. In supporting my instruction, I

have used / never used
(circle one)

the language arts department's non print media collection.

If you marked "never used" in A above, continue with the second column of responses. If you marked "used" in A above, go on to items B - G.

B. In supporting my instruction on the average I use the non-print media in the language arts department:

- 5 - more than once-a-week
- 4 - once-a-week
- 3 - biweekly
- 2 - monthly
- 1 - a couple of times a semester

C. When I do use the non-print media in the language arts department, overall I find the organization of the collection:

- 5 - exceptionally well organized
- 4 - reasonably well organized
- 3 - organized
- 2 - somewhat disorganized
- 1 - totally disorganized

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Please continue on the back side in the first column.

Library's Non Print Media Collection

G. In supporting my instruction, I

have used / never used
(circle one)

the library's non print media collection.

If you marked "never used" in G above, you are finished with this survey. Please turn it in to Mr. Fischer's box. If you marked "used" in G above, go on to items H - L.

H. In supporting my instruction on the average I use the non-print media in the library:

- 5 - more than once-a-week
- 4 - once-a-week
- 3 - biweekly
- 2 - monthly
- 1 - a couple of times a semester

I. When I do use the non-print media in the library, overall I find the organization of the collection:

- 5 - exceptionally well organized
- 4 - reasonably well organized
- 3 - organized
- 2 - somewhat disorganized
- 1 - totally disorganized

Please continue on the next page in the second column.

D. When I am trying to identify materials that fall within a specific topic area, I find my efforts at accessing the non-print media in the language arts department

- 5 - extremely easy
- 4 - reasonably easy
- 3 - somewhat difficult
- 2 - moderately difficult
- 1 - extremely difficult

E. When I examine the non-print media collection in the language arts department, I find the collection to be meeting my instructional needs

- 5 - extremely well: materials frequently meet my needs.
- 4 - reasonably well: materials meet my teaching needs
- 3 - adequately: sometimes materials meet my needs
- 2 - inadequately: materials infrequently meet my needs
- 1 - extremely inadequately: rarely meets my instructional needs

F. When I am requested to provide input into the selection and purchasing of new non print media for the language arts department collection, I offer my input to the department chair:

- 5 - frequently
- 4 - often
- 3 - sometimes
- 2 - infrequently
- 1 - rarely

Thank you! Please go on to the second column on the first page for additional responses.

J. When I am trying to identify materials that fall within a specific topic area, I find my efforts at accessing the non-print media in the library:

- 5 - extremely easy
- 4 - reasonably easy
- 3 - somewhat difficult
- 2 - moderately difficult
- 1 - extremely difficult

K. When I examine the non-print media collection in the library I find the collection to be meeting my instructional needs:

- 5 - extremely well: materials frequently meet my needs.
- 4 - reasonably well: materials meet my needs.
- 3 - adequately: sometimes materials meet my needs
- 2 - inadequately: materials infrequently meet my needs
- 1 - extremely inadequately: rarely meets my instructional needs

L. When I am requested to provide input into the selection and purchasing of new non print media for the language arts department collection, I offer my input to the librarian:

- 5 - frequently
- 4 - often
- 3 - sometimes
- 2 - infrequently
- 1 - rarely

Thank you for your observations!! Please return this survey to Mr. Fischer's box.

Appendix C

Staff Memorandum on the In-service Workshop Date, Time, and Place

MEMORANDUM

TO : Staff Members
FROM : Mr. David Jones
SUBJECT : In-service
DATE : Feb. 6, 1995

Wednesday, February 8, will be a busy day. Please note the following:

- * Short schedule - with buses leaving at 12:30 PM
- * Afternoon In-service 1:00 - 3:30 PM

AGENDA

- 1:00 - 2:00 PM Dave Fischer's presentation - Demonstration and hands on use of non print media - catalogue, computer generated - in computer lab. All dept. head member, English dept. and other interested parties please attend.
- 2:00 - 3:30 PM Multi-Intelligences presentation in cafeteria by Sheryl Eaton, Mary Nelson, and Dee Oster. *EVERYONE please attend.
- 3:30 - 6:00 PM Parent conference in your rooms. *EVERYONE please be presnt.
- 7:00 PM Regional tournament - Boys basketball game- HERE.

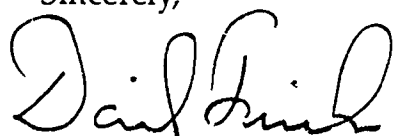
Appendix D
Letter Inviting Staff to the In-service Workshop

Language Arts Department
Alchesay High School
February 7, 1995

Dear High School Faculty,

I wish to invite you all to my in-service workshop, tomorrow, February 8, 1995, at 1:00 P.M. in the Chapter I computer lab. I will be presenting information and hands-on training on the use of a computer database. The database contains a catalog of all the non-print media of the language arts department and the school's library. The computer software demonstrated will be ClarisWorks 2.0 for the Macintosh. I will show you how to use the computer software and the database. It allows you to search for film and audio material cataloged by key descriptors, key search words, titles, authors, and other access points. For those who attend, I will install on their school Macintosh computer the software and the catalog and/or supply with a bound listing of the catalog. I hope you will attend--I think the one hour will be exciting, fun, and useful for your curriculum efforts. This workshop is part of my major practicum for my doctoral work for Nova Southeastern University. Thanks for your interest.

Sincerely,



David Fischer

Appendix E
Workshop Attendance Sign-in Sheets

In-Service Workshop on the Non-Print Media Catalog Database February 8, 1995 Sign-In Sheet

Please sign your name and indicate your position at the school.

| <u>Name</u> | <u>Position</u> |
|-------------------------|-----------------------------|
| 1. SHERYL EATON | CH. 1 COMPUTER LAB |
| 2. Rosemary Hugel Brock | Life Mgmt teacher |
| 3. David Ryan | Special Education Dept. |
| 4. MWHIL | ART |
| 5. Beverly Scovel | Spec. Ed. - Transition |
| 6. MARY NELSON | Math science chair |
| 7. Carolyn Jones | Math/science teacher |
| 8. Kay Johnson | Alternative school |
| 9. Janet Britten | W. K. M. enrichment |
| 10. Jan M. Vice | Vocational Technical - Auto |
| 11. E. E. Jones | S. J. A. I. L. |
| 12. Cathy Baldwin | Spanish / English |
| 13. Paul Johnson | English Dept. |
| 14. John Johnson | English |
| 15. [Signature] | Eng. Dept. |
| 16. [Signature] | Eng. Dept. |
| 17. Jean Kelly | Bus. Dept. |
| 18. | |
| 19. | |
| 20. | |
| 21. | |
| 22. | |
| 23. | |
| 24. | |
| 25. | |

Appendix F
Distribution Sign-up Sheets

In-Service Workshop on the Non-Print Media Catalog Database February 8, 1995 Sign-Up Sheet for an Installation of the Database or a Printed Copy of the Database

Please sign your name and indicate which format you would like to receive if you are interested in having the presenter install the database on your classroom computer or if you would like a printed copy of the database. Check ONLY one!

| | <u>Name</u> | <u>Format Preference</u> |
|----|-----------------------|---|
| 1. | <i>Karen Anderson</i> | <input checked="" type="checkbox"/> Computer format <input type="checkbox"/> Printed book format |
| 2. | <i>Jim McGee</i> | <input type="checkbox"/> Computer format <input checked="" type="checkbox"/> Printed book format |
| 3. | <i>Ca</i> | <input checked="" type="checkbox"/> Computer format <input type="checkbox"/> Printed book format |
| 4. | <i>Cathy Baldwin</i> | <input type="checkbox"/> Computer format <input checked="" type="checkbox"/> Printed book format |
| 5. | <i>Springer</i> | <input checked="" type="checkbox"/> Computer format <input type="checkbox"/> Printed book format |
| 6. | <i>Mary Miller</i> | <input type="checkbox"/> Computer format <input checked="" type="checkbox"/> Printed book format |

7. MAGGIE NUTT Computer format
 Printed book format
8. Save Ryan Computer format
 Printed book format
9. Ben Quid Computer format
 Printed book format
10. Patricia Patten Computer format
 Printed book format
11. Ann Morgan (Chibary) Computer format
 Printed book format
12. Jay Alvin Computer format
 Printed book format
13. Jim D. Reed Computer format
 Printed book format
14. Judy In Computer format
 Printed book format
15. Jones Computer format
 Printed book format

16. Rosemary Hylebroeck Computer format
 Printed book format
17. Paul Lobkin Computer format
 Printed book format
18. Paula Schuff Computer format
 Printed book format
19. Shyl Zaton Computer format
 Printed book format
20. _____ Computer format
 Printed book format
21. _____ Computer format
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22. _____ Computer format
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23. _____ Computer format
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24. _____ Computer format
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25. _____ Computer format
 Printed book format

Appendix G
In-service Workshop Booklet

**NON-PRINT MEDIA
CATALOG COMPUTER
WORKSHOP**



ALCHESAY HIGH SCHOOL



FEBRUARY 8, 1995



**MR. DAVID FISCHER
PRESENTER**

Background to the In-Service Workshop

I. Problem Description

Many teachers come and ask the department chairs and the librarian, "Do we have a film on?" in their search for quality non-print media (like videotapes, audio cassettes, computer software, and etc.) within their curriculum needs. No one can remember all the materials any department has, let alone locate a specific title. The staff has not had the proper access tools to help them locate and use the school's non-print media in their classroom instruction on a timely basis.

Evidence of accessibility problems of the collections abound. Most staff members take a brute-force approach and browse through the library or language art's shelves looking for interesting material or they rely on the department chair or the librarian's memory. Also a survey was taken early in this school year that showed many of you felt that the accessibility and organization of the non-print media collections were poor and that you felt that this impaired your utilization of the materials and was not meeting your instructional needs.

II. Solution Description

In order to rectify the problem as outlined, it was decided to create a computer catalog database and present an in-service workshop for the staff to train you in utilizing the developed computer database and, thereby, increase your integration of the non-print media into your ESL instruction. The solution was derived from a careful examination of the problem and possible solutions discussed in the literature. The solution was also derived from many discussions with staff members as to their specific access needs and technical capabilities with computer hardware and software.

III. Objectives of the In-Service Workshop:

By the end of this In-Service Workshop, you will:

- learn why and how the language arts department and library's non-print media were cataloged using a computer database.
- utilize a Macintosh computer to launch the software application program ClarisWorks and the non-print catalog database.
- identify the various components of bibliographic information contained in the screen display.
- learn various ways to search the catalog listings using the find feature with titles, key descriptors, and key search words.
- utilize a Thesaurus of Descriptors in searching for a set of catalog listings under a specific topic.
- sign-up for a Thesaurus of Descriptors and an installation of the computer software and database or a book listing of the database for your own professional use in accessing the non-print media for your lesson planning.

System Requirements for the Non-Print Catalog

In order to run the non-print media catalog, you will need the following computer hardware and software specifications:

- Macintosh computer with a hard disk drive with at least 3 MB free disk space; disk operating System 6.7 or higher.
- ClarisWorks 2.0 installed on the Mac's hard disk drive
- Non-print media catalog document file installed.

Launching ClarisWorks 2.0 from a Database Data File

In order to access the non-print media catalog database, execute the following procedural directions:

1. Boot-up your Macintosh computer,
2. open the appropriate windows to show the non-print media catalog database file. It is called, "AHS Media Cat"
3. Double-click the database file icon with the mouse. This will first launch the ClarisWorks application program and then open the catalog database file. Once the program is launched and the database file loaded into memory, the database screen will look like in Diagram A.

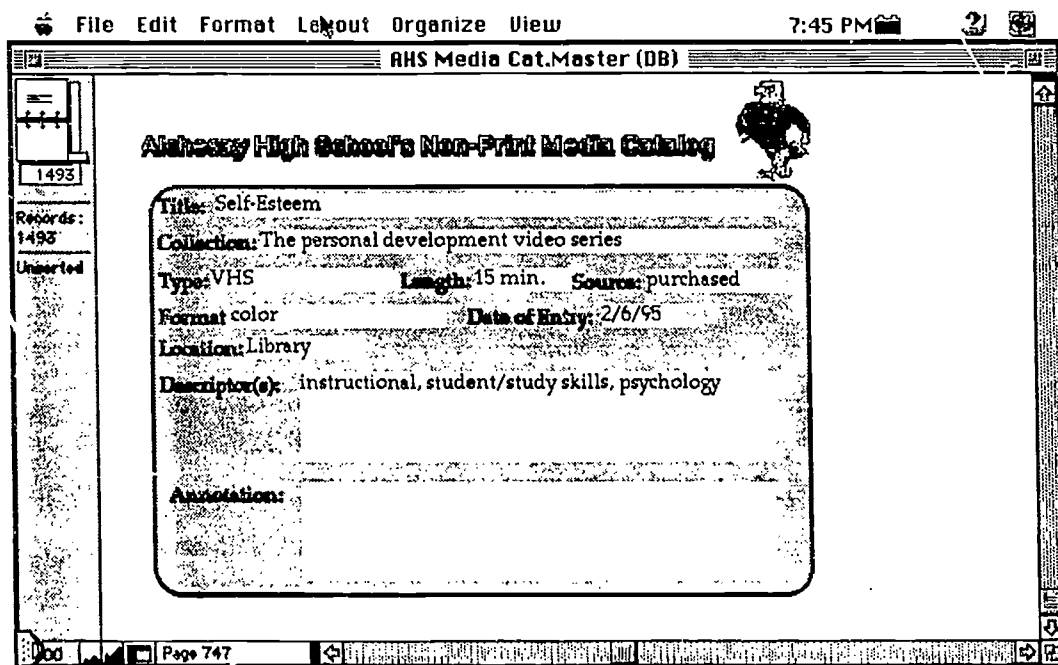


Diagram A

The Various Components in the Screen Display

The various parts of the database's screen are labeled; however, a more complete description of the possible bibliographic information that may be contained in each data field is described below.

1. **Title:** in this data field the complete title of the item is cataloged. The database is alphabetized by the first word of the titles. No title starts with *a*, *an*, or *the*.
2. **Collection:** if there is more than title on a videocassette or multimedia package, then in this data field the name of the collection is cataloged.
3. **Type:** in this data field the kind of medium the title is recorded in is noted. The most common types include VHS, audio cassette, lp record, filmstrip, multimedia, and CD-ROM.
4. **Length:** in this data field the viewing time in minutes is noted. If the time is estimated a question mark will appear in the field. If the time could not be estimated a set of question marks will appear. If viewing time is not relevant to the medium, no time will show.
5. **Source:** this data field indicates whether the item was purchased by the school or whether it was duplicated from another source (off air, in-house). If this field indicates duplication, it is possible that the title might be in violation of copyright law.
6. **Format:** this data field gives more specific information about the type of media the title is recorded onto. For example, videotapes are noted if the film is in color, black and white, or is subtitled in English if the film is in a foreign language. If the title is typed multimedia, the format field will show the various media the title is recorded in.
7. **Date of Entry:** this data field shows the date when the item was entered into the catalog database.
8. **Location:** this data field indicates where the title is located: the library or the language arts department. Hopefully, in the future, this database will be expanded to include more department holdings.
9. **Descriptor(s):** this data field contains key words that define and categorize the title with other titles in the catalog database. You can search the database for similar content of other titles using the descriptor field. A booklet called the Thesaurus of Descriptors is needed to use this field. It contains an alphabetical listing of all descriptors used to define the content of the titles.

10. **Annotation:** this data field contains a short narrative of the content of the title. This can be very helpful in selecting titles meeting curricular and lesson plan development. The annotation should not take the place of previewing the item before utilization in the classroom.

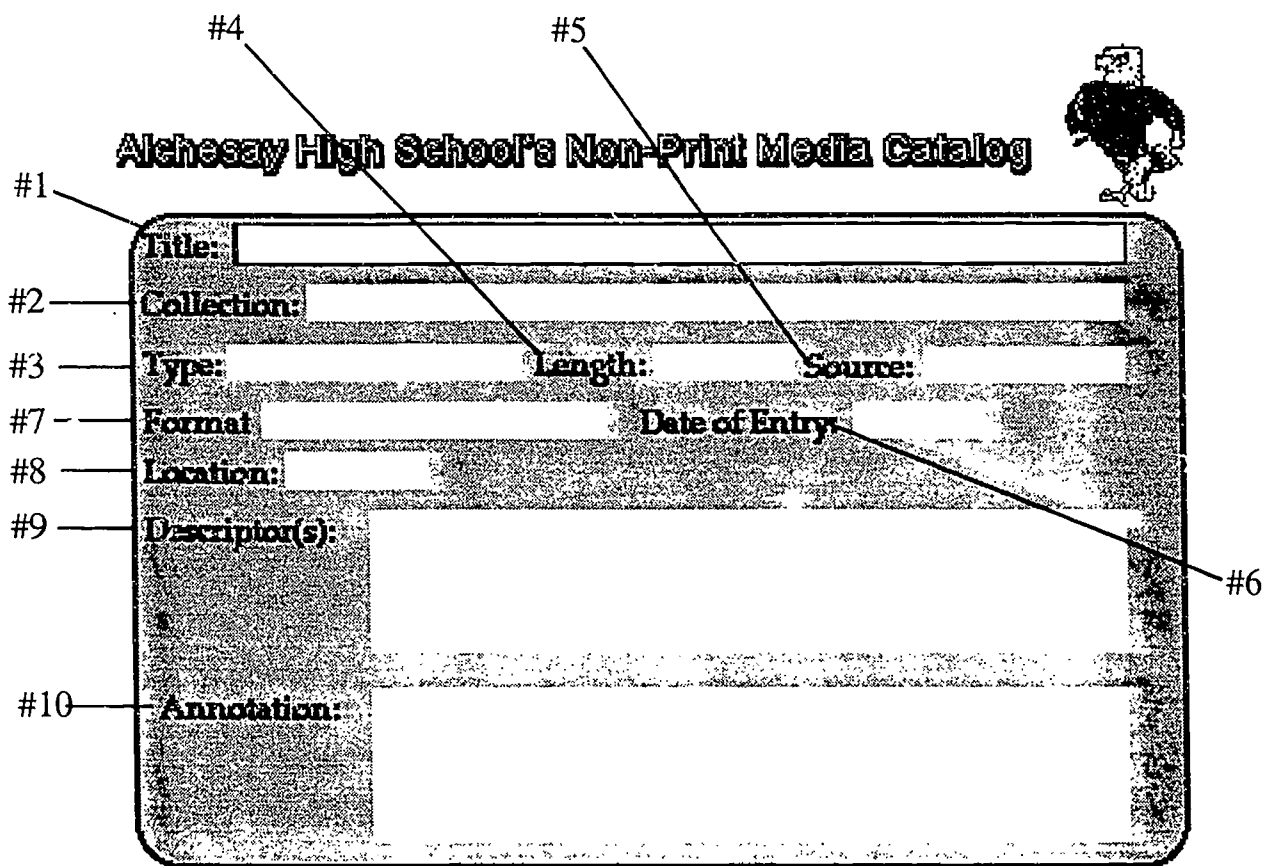


Diagram B

Searching the Catalog Listings

In this part of the in-service workshop, your presenter will demonstrate and have each participant use various features of ClarisWorks 2.0 to search and find specific cataloged titles. He will present:

- the find/change dialog window under the edit menu.
- the find feature under the layout menu, using the catalog's database screen
- multiple key word searches using different data fields.

Using the Thesaurus of Descriptors

In this section your presenter will demonstrate and have in-service participants explore the use of the Thesaurus of Descriptors as key words to search for a group of titles matching the user's query. The presenter will demonstrate:

- the use of the Thesaurus of Descriptors in searching the Descriptor field for similar content titles.
- a series of simulations with the participants to find various titles in the catalog as a summary activity.

Sign-Up

The participants will be provided an opportunity to have the software and the catalog database installed on their classroom Macintosh computers. A sign-up sheet will be provided for this purpose. Upon installation a copy of the Thesaurus of Descriptors will be provided. When updates of the catalog database are completed in the future, the faculty members with the database installed will receive the upgrade for replacement of the dated catalog. For participants without the necessary computer hardware, they will be given a chance to sign-up for a book catalog of the database. This will be updated on an annual basis or a supplement given periodically.

Appendix H
Book Catalog: Cover Letter for Distribution

Language Arts Department, Alchesay High School
March 2, 1994

Dear staff member,

Here is your copy of the Alchesay High School Non-Print Media Catalog in book format as you requested in the in-service workshop on February 8, 1994. The printout contains valuable information about the videos, filmstrips, and multimedia materials contained in the language arts department and the library. It is my hope that you find this a valuable resource in locating and selecting non-print media to support and supplement your ESL and regular content courses.

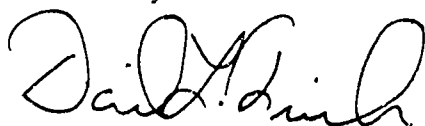
You will find preface information in the front of the book that will tell you about the organization and content of the catalog in this printed format.

I have retained a list of all staff members who own a copy of this printed format. A printed supplement will be provided at the end of each semester for inclusion into your book catalog. If you would like it bound into your copy, bring it to me and I will bind it for you. If you obtain a Macintosh computer in the near future and would like a current copy of the computer database catalog, please let me know and I will install the necessary software for you. In addition, if you want to search the computer catalog database, stop by the language arts department (Room 22), and I will give you access to a computer and the database in my classroom.

To borrow a non-print title from the language arts department, see me and I will loan you what you need. The library's check-out procedures are the same for non-print as it is for printed materials.

Thanks for your continued support in having our supplemental materials utilized more.

Sincerely,



David L. Fischer
Language Arts Department Chair
Alchesay High School

Appendix I
Book Catalog: Title and Forward Pages

**NON-PRINT MEDIA
CATALOG DATABASE
BOOK CATALOG**



FEBRUARY, 1995



**ALCHESAY HIGH SCHOOL
LIBRARY
LANGUAGE ARTS DEPT.**

Forward to the Alchesay High School Non-Print Media Book Catalog February, 1995

I. Problem Description

Many teachers come and ask the department chairs and the librarian, "Do we have a film on ?" in their search for quality non-print media (like videotapes, audio cassettes, computer software, and etc.) within their curriculum needs. No one can remember all the materials any department has, let alone locate a specific title. The staff has not had the proper access tools to help them locate and use the school's non-print media in their classroom instruction on a timely basis.

Evidence of accessibility problems of the collections abound. Most staff members take a brute-force approach and browse through the library or language art's shelves looking for interesting material or they rely on the department chair or the librarian's memory. Also a survey was taken early in this school year that showed many of you felt that the accessibility and organization of the non-print media collections were poor and that you felt that this impaired your utilization of the materials and was not meeting your instructional needs.

II. Solution Description

In order to rectify the problem as outlined, it was decided to create a computer catalog database and a derived book catalog to increase the instructional staff's integration of the non-print media into their ESL instruction. The solution was derived from a careful examination of the problem and possible solutions discussed in the literature. The solution was also derived from many discussions with staff members as to their specific access needs and technical capabilities with computer hardware and software and its ability to produce a book catalog for those staff members having little or no access to a computer.

The Various Components in the Book Catalog

The various parts of the book catalog are described below. To examine a more complete description of the possible bibliographic information that may be contained in each data field would require access to the computer database. The book catalog is supplied as a supplement to the computer database.

1. **Title:** in this data field the complete title of the item is cataloged. The database is alphabetized by the first word of the titles. No title starts with *a*, *an*, or *the*.
2. **Collection:** if there is more than title on a videocassette or multimedia package, then in this data field the name of the collection is cataloged.

3. **Type:** in this data field the kind of medium the title is recorded in is noted. The most common types include VHS, audio cassette, lp record, filmstrip, multimedia, and CD-ROM.
4. **Length:** in this data field the viewing time in minutes is noted. If the time is estimated a question mark will appear in the field. If the time could not be estimated a set of question marks will appear. If viewing time is not relevant to the medium, no time will show.
5. **Format:** this data field gives more specific information about the type of media the title is recorded onto. For example, videotapes are noted if the film is in color, black and white, or is subtitled in English if the film is in a foreign language. If the title is typed multimedia, the format field will show the various media the title is recorded in.
6. **Location:** this data field indicates where the title is located: the library or the language arts department. Hopefully, in the future, this database will be expanded to include more department holdings.
7. **Annotation:** this data field contains a short narrative of the content of the title. This can be very helpful in selecting titles meeting curricular and lesson plan development. The annotation should not take the place of previewing the item before utilization in the classroom.

Usability of the Book Catalog

The book catalog is derived from the computer database. The database is updated continually by the various departments and librarian as new titles are acquired. But because of expense in printing and duplicating, the book catalog is reprinted twice annually. The date is noted on the header of each page. A supplement to this catalog may be published separately for new titles. The book catalog is reprinted in the fall and winter of each year.

Appendix J
Book Catalog: Sample Pages

Title: Choices That Last a Lifetime **Location:** Nurse's Office
Collection: **Length:** 25 min.
Annotation: Features four Montana teen parents who candidly discuss their situations with a class of eighth-grade students. Includes a teacher's pamphlet. **Type:** VHS
Format: color

Title: Contraceptive Choices **Location:** Nurse's Office
Collection: Health Education Video Library **Length:** 16 min.
Annotation: This video discusses several of the most important contraceptive choices that teens have. **Type:** VHS
Format: color

Title: Coping With the Discomforts of Pregnancy **Location:** Nurse's Office
Collection: **Length:** 12 min.
Annotation: This video helps the pregnant woman deal with the discomforts of pregnancy and discusses the various symptoms she can expect. **Type:** VHS
Format: color

Title: Counseling Patients with Vaginal Yeast Infection **Location:** Nurse's Office
Collection: An Educational Video for Nurses **Length:** 12 min.
Annotation: Contains a discussion of vaginal yeast infection, including symptoms, causes, relationship to other common conditions, a discussion and demonstration of OTC cure products and typical counseling scenarios. (2 copies) **Type:** VHS
Format: color

Title: CPR **Location:** Nurse's Office
Collection: **Length:**
Annotation: Teaches students how to perform CPR on a dummie. **Type:** VHS
Format: color

Title: David's Story: A Teen Suicide **Location:** Nurse's Office
Collection: **Length:** 28 min.
Annotation: Describes the warning signs of suicide and discusses the ways in which friends and parents can help a depressed person regain their perspective. Includes a teacher's guide. **Type:** VHS
Format: color

Title: Diabetes: Head to Toe Care **Location:** Nurse's Office
Collection: **Length:** 11 min.
Annotation: Discusses care methods needed to prevent or care for human diabetes. **Type:** VHS
Format: color

Title: Did Jenny Have to Die? **Location:** Nurse's Office
Collection: **Length:** 41 min.
Annotation: Pt. 1--Road to Nowhere---14 min. **Type:** VHS
Pt. 2--Behund the Smiles----13 min. **Format:** color
Pt. 3--A Foundation for Living ---14 mins.
Includes teacher guide.

Title: Drinking and Driving **Location:** Nurse's Office
Collection: The Power of Choice (#7) **Length:** 30 min.
Annotation: Comedian/teen counselor Michael Pritchard talks with teenagers **Type:** VHS
about choosing to drink and drive and the frequent results of those **Format:** color
chices.

Title: Drugs and Alcohol: Part 2 **Location:** Nurse's Office
Collection: The Power of Choice (# 6) **Length:** 30 min.
Annotation: Comedian/counselor Michael Pritchard talks with teenagers about **Type:** VHS
how they make choices in life about drugs and alcohol. **Format:** color

Title: Drugs and Alcohol; Part 1 **Location:** Nurse's Office
Collection: The Power of Choice (# 5) **Length:** 30 min.
Annotation: Comedian/counselor Michael Pritchard talks with teenagers about **Type:** VHS
how they make choices in life concerning drugs and alcohol. Includes **Format:** color
a teacher's guide/pamphlet.

Title: Drugs, Smoking and Alcohol During Pregnancy **Location:** Nurse's Office
Collection: Health Education Video Library **Length:** 12 min.
Annotation: Overview of the effects of drug use on the development of the fetus **Type:** VHS
during pregnancy. **Format:** color

Title: Dying is Part of Living **Location:** Nurse's Office
Collection: **Length:** 40 min.
Annotation: Pt. 1--To Everythng a Season---13 min. **Type:** VHS
Pt. 2--Death as a Fact of Life---12 min. **Format:** color
Pt. 3--The Cycle of Life--14 min.
Includes a teacher's guide.

Title: Female Anatomy & Physiology **Location:** Nurse's Office
Collection: Family Health Education **Length:** 27 min.
Annotation: Discusses female anatomy and its special needs. **Type:** VHS
Format: color

| | |
|--|--|
| <p>Title: Fetal development Collection: Annotation: This video discusses physical development of the fetus and the special needs of the pregnant woman.</p> | <p>Location: Nurse's Office Length: 15 min. Type: VHS Format: color</p> |
|--|--|

| | |
|---|--|
| <p>Title: Gestational Diabetes Collection: Health Education Video Library Annotation: Discusses the causes, symptoms, and care that pregnant women need to prevent gestational diabetes.</p> | <p>Location: Nurse's Office Length: 14 min. Type: VHS Format: color</p> |
|---|--|

| | |
|---|--|
| <p>Title: Hypertension: Your Blood Pressure is Showing Collection: Focus on Health Annotation: Discusses the symptoms and causes of high blood pressure.</p> | <p>Location: Nurse's Office Length: 18? Type: VHS Format: color</p> |
|---|--|

| | |
|--|---|
| <p>Title: Job of Your Life, The : The Reality of Teen Parenthood Collection: Annotation: Discusses the problems facing teenagers who choose to keep their baby. Includes a teacher's guide.</p> | <p>Location: Nurse's Office Length: 15 mins. Type: VHS Format: color</p> |
|--|---|

| | |
|--|--|
| <p>Title: Male Anatomy & Physiology Collection: Family Life Education Annotation: Discusses the human male anatomy and its functions.</p> | <p>Location: Nurse's Office Length: 15 min. Type: VHS Format: color</p> |
|--|--|

| | |
|--|--|
| <p>Title: McMurphy Nursing Project: Nursing, Check It Out Collection: McMurphy Nursing Project Annotation: This video educates students on the values and opportunities in the career of nursing. Study Guides available.</p> | <p>Location: Nurse's Office Length: 16 min. Type: VHS Format: color</p> |
|--|--|

| | |
|--|---|
| <p>Title: Miracle of Life, The Collection: Annotation: Shows the development of new life as new methods of photography are employed to trace the development of the single new cell into an embryo, then a fetus, until finally a baby is born.</p> | <p>Location: Nurse's Office Length: 60 mins. Type: VHS Format: color</p> |
|--|---|

| | |
|--|--|
| Title: Onset of Labor | Location: Nurse's Office |
| Collection: | Length: 8 min. |
| Annotation: This video discusses the symptoms and fears of the pregnant woman at the start of pregnancy. | Type: VHS Format: color |
| Title: PEI: 14th Place | Location: Nurse's Office |
| Collection: Professional Research Inc. | Length: 26 min. |
| Annotation: | Type: VHS Format: color |
| Title: Post Partum Care | Location: Nurse's Office |
| Collection: | Length: 11 min. |
| Annotation: Gives special tips and advice to help new mothers in the first few months after the baby is born. | Type: VHS Format: color |
| Title: Pregnancy and Nutrition | Location: Nurse's Office |
| Collection: | Length: 12 min. |
| Annotation: This video presents information on the special nutritional concerns of women during pregnancy. | Type: VHS Format: color |
| Title: Prenatal Care | Location: Nurse's Office |
| Collection: | Length: 12 min. |
| Annotation: Discusses the special needs of the pregnant woman in regards to nutrition, exercise and rest. | Type: VHS Format: color |
| Title: Prepared Childbirth | Location: Nurse's Office |
| Collection: | Length: 13 min. |
| Annotation: This video helps the pregnant woman prepare for the actual moment of childbirth. | Type: VHS Format: color |
| Title: Profession of Opportunities: College of Nursing | Location: Nurse's Office |
| Collection: Profession of Opportunities | Length: 15 min? |
| Annotation: Gives information on the University of Arizona's College of Nursing. | Type: VHS Format: color |

Appendix K
Thesaurus of Descriptors Cover and Booklet Sample Page

**NON-PRINT MEDIA
CATALOG DATABASE
THESAURUS
OF
DESCRIPTORS**

•
FEBRUARY, 1995

•
**ALCHESAY HIGH SCHOOL
LIBRARY
LANGUAGE ARTS DEPT.**

descriptor: adventure

descriptor: advertisement

descriptor: aerospace

descriptor: Africa

descriptor: AIDS

descriptor: American government

descriptor: American history

descriptor: American literature

descriptor: American Revolution

descriptor: ancient history

descriptor: animation

descriptor: Anonymous

descriptor: Apache

descriptor: Arapaho

descriptor: Argentina

descriptor: Arizona

descriptor: art

descriptor: art appreciation

descriptor: artists

descriptor: astronauts

descriptor: Austria

descriptor: autobiography

descriptor: Aztecs

descriptor: Beethoven

descriptor: Bierce, Ambrose

Appendix L
Procedural Manual for the Non-print Media Collections

**The Procedure Manual
for
The Alchesay High School Non-Print Media Collections
February, 1995**

A. Rationale for this Manual

A team of teachers at Alchesay High School during the 1994-1995 school year wrote this manual as a part of the Language Arts Department chair's major practicum in partial fulfillment of his doctoral studies for Nova Southeastern University. The practicum pointed out several problems with the non-print media collections housed in the high school's language arts department and the library. The instructional staff had difficulty in locating and identifying media in the collections to support their efforts in lesson planning for the Limited English Proficient student population who would benefit from the infusion of non-print media into instruction. The teachers lacked bibliographic information to facilitate their access of the non-print media collections. Therefore, a team of staff members constructed and designed a computer database to enter, store, and access bibliographic information about the collections. Out of their efforts came this procedural manual that specifies the management issues surrounding the non-print media collections and the newly-created computer database of bibliographic information. These policies and procedures are listed below.

B. Definition of Management

For quality management of a non-print media collection to occur, the identification of the school's personnel responsible for the continued growth and organization of the collection is necessary. The librarian is responsible for the high school's library's collection and each high school department chair is responsible for its department's collection. Maintenance of the computer database is the primary responsibility of the language arts department chair with help from the librarian and the other department chairs who will volunteer to catalog new acquisitions and provide update information as necessary.

C. Definition of Non-Print Media

Non-print media can be defined as any recorded medium that is not based on standard book format and must use electronic playback equipment to project and display the medium. This includes, but is not limited to, videocassette films, 16 mm films, audio cassettes, filmstrips, computer programs, CD-ROM computer programs, vinyl records, overhead transparency packages, 32 mm slide sets, and multimedia instructional packages. The definition excludes games, posters,

globes, maps, picture and poster sets, and other instructional items that are not in standard book format, yet do not require electronic projection or playback equipment. The team of original catalogers understood that these types of items were small in number throughout the school. However, this definition needs to remain open-ended as the library and department's collections change and technology upgrades. All non-print media items as defined should be cataloged as formatted below.

D. Identification of Patrons to the Non-Print Media Collections

As the high school staff over the years purchased the collections' titles, they assumed that the purpose of non-print media was to serve as instructional supplements. The staff intended them for use by the teachers in the classrooms. Therefore, the patrons of the non-print media collections are the instructional staff. Students are generally not allowed access to the collections because of the title's cost and the general instructional purpose of the collections' titles.

E. Goals for Managing the Non-Print Media Collections:

- Physical Access:** The managers of the non-print media collection should strive to give the instructional staff physical access to the computer database bibliographic information system and to the collections during regular school hours.

- Security:** The managers of the non-print media collections should physically keep their collection in a secure location that can be locked during non-school hours to deter theft and unwarranted examination of the collection. Further, the collections should be housed in locations throughout the school other than within classrooms so that the general students and non-instructional staff cannot easily locate the collections to deter and minimize theft. Teachers must provide adequate security to all checked-out media in their possession. They should not be loaned to students, monitored closely during classroom use to deter theft and misuse, and should be locked-up when not in use during classroom instruction. All managers of non-print media collection must communicate to their patrons these security measures.

- Shelving:** If security measures are properly conducted, the managers of the non-print collections should strive to shelve their collection in a central location within their department so that the instructional staff can physically locate the collection's titles. The titles should be arranged in some easily understandable format to facilitate access. Alphabetical arrangement of titles of like media could be one method of organization.

•**Circulation:** In order to manage the circulation of non-print media titles within the instructional staff more effectively, each manager of a non-print media collection needs to create a check-out card for each title like the standard procedures the high school library's book collection uses. The manager must establish for his/her collection standard loan procedures for checking out a title, length of circulation time, and check-in procedures. The utilization of check-out cards allows other teachers to find out who has a particular title checked-out and enhances security measures--the manager can locate readily every item loaned from his/her collection. Non-print collection managers must communicate to their patrons the particular check-out procedures used for their collections in order to maintain and enhance circulation management.

•**Projection Equipment:** Since the high school does not have a centralized audio-visual department specifically designed to coordinate the cooperative sharing of projection equipment for non-print media, each department must purchase, operate, and maintain its own equipment. The library does have some equipment for loan and the librarian sets the library's circulation procedures. In order for the non-print media to be successfully accessed, it is up to the managers of their collections to assess, purchase, repair, and replace projection equipment as necessary.

•**Inventory:** Since the advent of the computer database, inventorying a collection's titles should not be a cumbersome chore. Each collection manager must have changes noted in the computer database on a regular basis for accurate inventorying to occur. An annual inventory check should be made against the computer database. The language arts department chair will provide a shelf list for each collection for inventory purposes in May of each year. The collection managers should then manually take an inventory of their collection and report back to the language arts department chair any changes in their collections for updating the database.

•**Compliance with Copyright and Fair Use Laws:** During the cataloging process of the non-print media collections, many violations of copyright and fair use of off-air recordings were noted. The high school has a moral, ethical, and legal imperative to hold within the collections only items that meet copyright and fair use laws. When titles are copied off-air onto video, the tape should state the length of time the school has in retaining the copy. This information should be obtained from several reference sources found in the library. If no permission information is found, the following fair use guidelines (common in the literature on copyright issues) must be adhered to for utilizing commercial television broadcasts:

- Off-air video recordings may be kept for no more than forty-five calendars days, then the tapes must be erased.
- The recordings may be shown to students only within the first ten school days of the forty-five day period.

- The recordings may be shown no more than twice during the ten day period (and the second time only to reinforce instruction).
- After that, only teachers may see the tapes to decide if they want to use the program as part of their curriculum.
- Programs can be recorded only once and only at a teacher's request, not "just in case." Duplicate copies for teachers can be made; all copies are subject to the same restrictions as the original.
- The tapes can not be physically or electronically altered.
- All copies must include the copyright notice as recorded.

The above fair use guidelines also apply to some public television broadcasts, but public broadcasting also offers more liberal taping rights to many of its programs, including unlimited taping rights to National Geographic Specials. Each cable network has its own set of rules and should be sought when taping off-air. Since the computer database of bibliographic information supports the notion that the titles are a part of a *permanent* collection, tapings that must be erased within a year after should not be included in the computer database. The managers of the collections should shelve these short-lived items separately. All duplicate films should be erased as noted in the computer database that violate the fair use guidelines and a legal purchased copy should be obtained from a vendor. Purchased titles should be entered into the computer database on a regular basis. If the staff utilizes on a regular basis illegal or suspect titles, then the collection managers should note this and make every effort to purchase these titles for compliance of copyright law.

•**Purchasing:** in order to avoid the expense of purchasing duplicate non-print media titles among the collections, the collection managers must check the computer database whenever titles are considered for purchasing. This will help eliminate the cost of having more than one title at the school for circulation. Also managers should examine the database for subject and content gaps in the collections and help fill these with appropriate purchases. Once media titles have been purchased and arrived physically at the high school, they should be sent to the language arts department for prompt cataloging into the database and returned to the department. The department manager should then attach a checkout card to the newly purchased titles and shelve them appropriately.

F. Management of the Bibliographic Information of the Non-Print Media Collections

•**Computer Hardware and Software Requirements:** Presently, the non-print media computer database must be supported by proper equipment and software. A Macintosh computer (Apple) with a hard disk drive with at least 3 MA of free disk space is required. The operating system must be System 6.7 or higher (preferably, System 7.1 or System 7.5). The database requires the software package ClarisWorks 2.0 from Claris Corporation installed on the computer's hard disk.

And the non-print media catalog document file must be installed onto the hard disk drive as well. Without these system requirements, the database will not work. It is possible to translate the database file to an IBM system format with today's technology.

• **Data Entry Procedures:** Data entry of the bibliographic information of the existing has been accomplished. But new items are found in the school as well as new acquisitions through purchasing and off-air duplication that the school holds secure copyright privileges must be entered into the database on a regular basis. The managers of the non-print media collections must turn-over to the language arts department all such new titles and updates of existing titles for inclusion into the database. This must be done on a periodic basis for the database to be current in its information. The first three weeks of every semester must be dedicated to the updating of the catalog database. Once new items are entered and old items deleted, a supplement to the book catalog must be published and distributed to the staff. A list of teachers possessing a copy of the computer database installed on their computers must also be updated through a reinstallation procedure. And new Thesaurus of Descriptors published and distributed to the teachers who have the database installed on their classroom computers. Every two to three years (four - six semesters) a new book catalog will need to be printed, published, and distributed to the staff, superseding the old catalog and supplements once several updates have occurred.

• **Maintenance and Security of the Database:** electronically stored information is fragile and computer equipment does break down eventually. The language arts department chair in charge of the database, must take adequate precautions to archive the database by making sufficient backup copies of the database. It is suggested that three copies be made and updated monthly. One archive copy must be securely stored off-school site in case of a major catastrophe at the school site.

• **Maintenance of the Book Catalog:** Book catalogs age rapidly as new information is entered into the computer catalog database. However, printing and distributing a new book catalog on a frequent basis is unfeasible because of cost and labor. Therefore, every semester a supplement of new titles should be published and distributed to the staff generated from the computer database. However, a new book catalog will be needed after four to six supplements. By this time the cost and labor of publishing a new book catalog will be warranted. Copies of the book catalog should be distributed widely to the teaching and administrative staff so that access to the collections is enhanced.

• **Maintenance of the Thesaurus of Descriptors:** As new titles are cataloged and more staff access the computer database, the thesaurus of descriptors will need updating as well. New descriptors will be needed as content/subject areas in the non-print media collections are started or expanded. The language arts department chair will hold the working thesaurus of descriptors as new

cataloging progresses. New subject descriptors will be utilized and added to the descriptor's database as well. When the bibliographic information is sufficiently updated on the computer database and it is warranted that the updated database be reinstalled on the teachers' computers, then an updated Thesaurus of Descriptors should be generated from its computer database, duplicated, published, and distributed to the staff. Because the Thesaurus of Descriptors is also maintained on a computer database, the procedures for security of the main catalog database should be followed as well for this database as well.

• **Staff Training:** As staff turn-over occurs, it will become necessary to train new high school staff as well as retrain the existing staff on the operation of computer systems and the utilization of the computer database in accessing the bibliographic information the database contains on the various non-print media collections throughout the high school. It will be the primary responsibility of the language arts department chair to conduct these training sessions. In-service workshops should be designed and scheduled on an annual basis for the staff to continue to upgrade and improve their computer literary skills.