Is library automation feasible for all elementary schools?

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Is library automation feasible for all elementary schools?

Abstract
Library automation has been adopted by many library media centers, but is it appropriate for all libraries? The justification for automation of four library media centers will be based on the literature reviewed, current operations of these centers, and personal experiences and observations in working with these library media centers. There have been many concerns about whether library automation is feasible for these library media centers, and that is the reason for the focus of this study. Library automation should not be something that is implemented just because "everyone else is doing it".
Is Library Automation Feasible for All Elementary Schools?

A Graduate Review
Submitted to the
Division of Educational Technology
Department of Curriculum and Instruction
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Master of Arts
UNIVERSITY OF NORTHERN IOWA

by
Tiffany Bayless
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This Review by: Tiffany Bayless
Titled: Is Library Automation Feasible for All Elementary Schools?
has been approved as meeting the research requirement for the Degree of Master of Arts.

September 15, 1996
Date Approved

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Introduction

Library automation has been adopted by many library media centers, but is it appropriate for all libraries. The justification for automation of four library media centers will be based on the literature reviewed, current operations of these centers, and personal experiences and observations in working with these library media centers. There have been many concerns on whether library automation is feasible for these library media centers and that is the reason for the focus of this study. Library automation should not be something that is implemented just because "everyone else is doing it".

Library automation has grown to include so much more than just circulation and card catalog. Review of the literature has shown that when automation is considered for the library media center there are more areas to include other than circulation and card catalog. There are advantages and disadvantages of automation, as reported in the literature, which are items that need to be considered before a library media center makes the decision to automate. Looking at the current situation for the library media centers listed above and comparing the advantages and disadvantages of automation, there have been many interesting conclusions. Two questions that should be kept in mind when considering library automation are: is it feasible for your situation and what functions should be automated?

Media centers in the Red Oak Elementary School District are the basis to this literature review. There are four grade
level elementary buildings each equipped with a library media center with approximately one hundred students at each of two of the buildings and approximately two hundred students at each of the two remaining buildings. Three of the library media centers are only open for a half day, while the fourth one is open all day. There is one full time library media specialist for all four buildings and one part-time paraprofessional at each building. The library media specialist is responsible for management of the library media centers and conducting classes pertaining to library media skills. The paraprofessionals are responsible for circulation procedures, processing books, and creating and filing card catalog cards.

Some of the current functions of the library media centers are already automated. There is a card catalog maker software program that is used to prepare cards for the card catalog and also an overdue software program utilized to create daily overdue notices in each of the library media centers. Two of the library media centers have CD-ROM reference workstations to equip students with appropriate resources for research. One library media center currently has access to online services and a building wide network while the other three library media centers have future plans for online access.

Purpose

The literature for library automation is overwhelming and if you don't know specifically what you are looking for then you will have a difficult time sifting through all the
information available. There are many ways to approach the topic of library automation and that depends on what level of knowledge you already have on the subject. Initially a person needs to provide rationale for an automation system so that you have the support needed to implement a system and can decide what functions would be more efficient if that function were automated. This is the approach this review has taken to determine justification of library automation.

Library automation is a broad topic that keeps growing with new technologies added every day. Anymore library automation ranges from circulation and card catalog to access of online services. Some library media centers may find that to some extent they are already automated and it may be enough to provide appropriate services to the patrons and efficiently maintain the library media center.

The review of literature allowed this researcher to see the advantages and disadvantages of automation and then to compare this to the Red Oak Elementary. Limited information from certain literature on justification of automation required the use of several sources. This information was formatted together to make the decision on whether or not to automate. Reviewing the literature gave this researcher new insight into what library automation is and how to approach implementing systems in the library media centers. Some functions that would benefit from automation are already automated in the current library media centers.

Experiences in working with these four library media centers for the past six years will be applied in this review
along with personal observations of the procedures and utilization of the library media centers. Traveling from building to building doesn't allow the media specialist to see how the library media centers are utilized every day, but input from paraprofessionals provides additional information needed for decision making.
Review of Literature

What is Library Automation?

Library automation has been defined in many different ways in the literature that was reviewed. Library automation is "the use of computer and telecommunications technologies in the library" (Cohn, Kelsey, and Fiels, 1992, p. v). This particular definition is very broad and lends itself to much explanation. According to this definition this could include such items as basic library functions, reference resources, access to remote sites, administrative functions, and services that will be utilized by the patrons. Most library media centers, therefore, have the capability to justify automation in some form or another.

One area that can definitely be justified is in the area of administrative functions. Any way of making a library media specialist's job easier and save time for more important services, such as assisting students and faculty in accessing materials, is a benefit. If a library media specialist can automate some of the elements that are needed for ordering of materials, then they may give more time to work with their patrons and serving their needs.

Peterson (1994) stresses building on the current success of library automation by planning for the integration of library resources into a building network, develop networked and stand-alone CD-ROM stations, access to online services, and telecommunications. Networking allows even more access to the library media centers. The faculty and students can access resources from their classrooms. Networking with other
library media centers makes more resources available to the patrons of a library media center. CD-ROM, online services, and telecommunications offer a variety of resources in various formats to meet the needs of all patrons.

**Needs Assessment**

In a good plan a needs assessment is conducted to determine if services are needed or if adaptations need to be made to current services. Cohn, Kelsey, & Fiels (1992) provide a list of evaluation tools for determining automation which includes: collecting statistical data on the collection, patrons, acquisitions of new materials, library staff, circulation, and card catalog usage. In looking at the four current library media centers being evaluated, the above items were examined. Statistical data was not collected but approximations were established that will help in determining if automation is necessary. Justification of automation involves looking at all of the above factors and then establishing goals for the library media centers.

Establishing goals for the library media center to accomplish provides better direction for the library media center when it comes to deciding on whether or not to automate. Kroll (1995) stated one goal of any school library is "to provide current information in a wide range of formats to meet the diverse learning needs of students" (p. 8). The way library automation has changed with the new technologies, this goal is easily applied to almost any library media center. "Patrons can access multiple media types from one computer" (Crowley, 1995, p. 8). Library media centers can
meet these needs by providing access to electronic resources via CD-ROM and online services and some library media centers may already have these services implemented into their program.

Another major goal should be to "provide better service to patrons" (Grover, Bocher, Christman, Shires, & Nix, 1991, p. 3). Networking automated card catalog systems allows for patrons to access materials from more than just the library media center and a broader selection of materials when networked with other library media centers. These are just a couple of examples of how this goal can be accomplished. Library media centers may decide that non-automated items can help them accomplish this goal, such as, increasing access time to the library media center and staffing for this extra time.

Advantages of Library Automation

The advantages of library automation are addressed here to be utilized as a comparison to our current system. "Increasing the amount of time the computer is in use increases its benefit and reduces its cost per use" (Rux, 1995, p. 47) is one concept that sometimes gets ignored because people do look more at how much something costs as opposed to cost effectiveness. Circulation and maintaining the card catalog require a lot of work regardless of a library's size, and automation can free up staff time to spend more time providing assistance to patrons and provide better access to the collection (Grover, et al., 1991). One justification may be the more beneficial use of staff.
Drawbaugh and Parton (1994) report on two school districts that networked their automation systems and found many advantages in one school district which include: saving time, decreases patron/staff frustration, assists in efficient retrieval of materials, facilitates the generation of administrative reports, saves the school money, and aids in establishing an efficient work area in the library media center and the classroom. Most of literature provided similar advantages and benefits of automation. This view looked more at automation from the standpoint of networking which is where the benefits will be seen in one of the library media centers included in this review.

Rux (1994) gives arguments for automation that will help any library media specialist in deciding if automation is going to benefit their library media center. Arguments for automation include: saves time spent on stamping, filing, and retrieving circulation cards; frees time to help students; saves time on reports; can measure user patterns and needs; allows one to spend book budget better; helps locate inventory; has instant way to bill for overdue or lost items; prints instant bibliographies; turns card catalog into databases; and makes it possible for small and large libraries to tap into larger databases. Much of the literature reports how automation can benefit both the patrons and library media center staff. This particular article gave both of those views and provided a strong argument for all library media centers to use when planning for automation.
**Disadvantages of Library Automation**

Disadvantages of library automation systems need to be looked at to determine if the current system is better than automating. Automation is disruptive, takes time, is complex, demands commitment, and requires careful planning (Grover, et.al., 1991) are a few of the disadvantages of library automation. This was an area where there wasn't much information to note that library automation may not be as wonderful as everyone lets on. Through conversations with other library media specialists that have automated systems, there are a few more disadvantages that have come out. Ability to receive support from some vendors and incompatibility with hardware and software are things that have been presented. The hardware problem goes along with the careful planning mentioned above.

**Limitations of Manual Card Catalogs**

There are certain limitations in manual methods that can be more effective if automated. Some limitations of manual methods related to the card catalog are: localized, can only be used by one person at a time, inflexible, bulky, and creates storage problems (Buckland, 1992). These factors need to be addressed so that library media specialists can see how their services are very limited for their patrons. When a whole class of students come into the library media center to look up information on Iowa history only one student can access the drawer that will provide them information on Iowa where as, with an automated card catalog several students can access the same sources depending on the number of stations.
Conclusions and Recommendations

If there is a low level of activity and limited access to the library media center this does not justify the expense and time required to automate. Library media centers may have other priorities, i.e. increasing staff to provide more access to the library media center and increasing the book budget (Grover, et.al., 1991). These statements helped to decide if automation could be justified for the four library media centers in one school district. Circulation in the library media centers varies according to when library media classes are held and when teachers allow students to utilize the library media center. The card catalog is utilized more by the older students due to instruction on use and reading ability. Some functions of the library media centers are already automated and plans for the future show that services of the library media centers are moving in the right direction towards automation.

Circulation may not always be the best starting point for automation when figures don’t support that type of automation. Card catalog automation would benefit the four library media centers in the ability to share resources as opposed to duplicating resources for each library media center. With one building already networked, automation of the card catalog would provide teachers and students access of the library media centers resources from their classrooms. Circulation may come along later in the planning when the elementary buildings are combined allowing access to one library media center.
Buckland (1992) has a "drift-down" principle which needs to be kept in mind which is "a.) nothing should be done by a professional that can be done by a technician, b.) nothing should be done by a technician that can be done by a clerk, and c.) nothing should be done by a human being that can be done by a machine" (p. 22). Library media specialists need to look closely at the functions and services of the library media center and make sure they are efficient processes.
References


