

CHALLENGES OF PROCESSING DIGITAL-BASED LIBRARY MATERIALS IN SCHOOL LIBRARIES

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Abstract

This research aims to reveal the challenges presented by the development of library automation in school libraries. This research aims to explain and describe digital-based library material processing activities in the SMAN 1 library. This research uses descriptive qualitative research methods. The results of the research are the challenges they face in the form of a lack of quantitative and quality human resources. The available facilities are inadequate, especially to support digitalization processes such as implementing OPAC. This is due to frequent changes in collections based on curriculum and government policies.

Keywords: automation library, challenging, digital, library management, school libraries

INTRODUCTION

A library is an information institution that stores all forms of information that is arranged systematically and can be useful for all of us. The information available in libraries varies greatly, from information packaged in print media to electronic media. The content of the information varies according to the needs of the community. Libraries are a source of information that can become knowledge for a society, which makes people have very broad knowledge and insight (Saepudin et al., 2017).

The development of information and communication technology has greatly influenced library activities (Andriani, 2016). The influence of information and communication technology on libraries is very clear with the latest developments in libraries, namely the emergence of digital libraries which provide services quickly and precisely according to the needs of users. This digital library is oriented towards internet networks and digital data. In this case, it is clear that libraries must continue to follow developments in information and communication technology by harmonizing all activities, facilities and services that utilize information and communication technology (Rodin, 2019).

With the rapid development of information and communication technology, it has encouraged the birth of library automation. Library automation is closely related to the use of computers to assist in library activities such as collecting, processing and other administrative activities (Potoboda et al., 2016). Library automation is an automation system using computer

devices utilizing information technology that can help the administration process, information processing and other library activities effectively and efficiently (Subrata, 2009).

Library materials or library materials are an important element in a library system. Apart from space, buildings, equipment, personnel and budget, library materials are also components that support the provision of good library services. According to Yulia (2011:1) there are types of collection materials such as printed collections, non-printed works, micro forms and works in electronic form. Processing library materials is the process of providing information sources in book form. However, with technological advances continuing to develop, librarians are now increasingly encouraging the provision of library material services online, rather than manually via print. Providing library materials online becomes more efficient in terms of managing library space and providing access to books and other library materials in digital form.

The school library is one of the libraries that still applies the conventional system. School libraries usually experience many challenges and difficulties in managing the library. This difficulty is caused by several factors such as the lack of funds coming in to support libraries, libraries are still considered unimportant by the school, the academic community from schools do not understand the importance of libraries for learning activities (Husdar, 2023). In fact, libraries are an important element in education because libraries can maintain and improve effectiveness, efficiency and essence in the teaching and learning process (Syahdan et al., 2021).

Talking about school libraries, Sulisty-Basuki (1991) in his book "Introduction to Library Science", a school library is a library that is part of a school and is fully managed by that school. The main aim is to help schools achieve their goals, especially in the field of education and teaching, which have been set out in the school curriculum. Thus, school libraries have an important role in supporting educational and learning activities in the school environment.

The existence of a library in a school provides a great opportunity to educate students and encourage students to learn independently (Kalida & Mursyid, 2014). However, in reality, the existence of libraries in schools is sometimes neglected by children and is often ignored. School libraries are sometimes still considered unimportant so that the library is like a boring book warehouse. It is still often found that school libraries are not suitable for use, the available collections are not in accordance with the needs of the academic community, especially students, the library collections only focus on subject books and the services provided are still very simple (Rohiyatun & Aryani, 2020). In fact, the school library should be a place to meet students' information and knowledge needs. School libraries are also recreational in nature which encourages students to come and utilize the collections in the library (Huda, 2020).

These obstacles in the implementation of digital-based library material processing are certainly difficult for some school libraries. Even though school libraries are required to keep up with the times and must provide excellent service, if the library is not ready in terms of resources, funds and support it will certainly be a big problem (Andike et al., 2023). Apart from that, researchers found that many school libraries still adopt conventional systems in all forms of their activities. Even so, this conventional system, which is so easy and old-fashioned, still cannot be implemented optimally and effectively. Every school has not yet carried out maximum processing of library library materials because there are no special personnel who handle and are directly responsible for the library sector (AG et al., 2020).

Apart from that, based on temporary observations that have been made, the majority of school libraries in Bandung Regency have not maximized the use of technology. In fact, they don't use technology in library activities. Especially in processing library materials which

includes cataloging in providing OPAC services. OPAC (Online Public Access Catalog) is a search tool through a computer catalog that contains a bibliographic list and can be accessed by the general public to search for collections available in libraries, bookstores or other information units (Elsadantia, 2023). The advantage of OPAC is that it makes it easier for users and library staff to retrieve information. However, because the school library has a collection that is dominated by textbooks. Therefore, the use of OPAC was not implemented. Even the manual catalog process is often overlooked.

The situation and conditions above are like those experienced by one of the school libraries in the East Bandung area, namely the SMAN 1 Cileunyi School Library. SMAN 1 Cileunyi is a senior high school in Cileunyi and is one of the favorite schools in Bandung Regency. SMAN 1 Cileunyi is accredited A. It has won several awards from both academic and non-academic awards. However, the library is still accredited B. This B accreditation was obtained because the SMAN 1 Cileunyi school library has good facilities, collections and services in accordance with existing rules, laws and regulations. However, the school library at SMAN 1 Cileunyi does not yet understand the application of information and communication technology in its various activities.

The above situation is very unfortunate for SMAN 1 Cileunyi. The problem of libraries not maximizing the use of technology in their activities reduces the value of school accreditation. One of them is that the use of OPAC has not been implemented to facilitate information retrieval. The state of the library at SMAN 1 Cileunyi which still does not understand cataloging using the OPAC system. This is because the computer equipment facilities in the SMAN 1 Cileunyi library are still very minimal or even non-existent. Apart from that, because the library collection experiences additions and reductions from year to year, this makes school libraries object to the cataloging process.

Based on previous research conducted by Utami (2023), digital-based library material management in school libraries involves several stages. These stages include Planning, Organizing, Commanding, Coordinating, Controlling. Apart from that, it is also necessary to pay attention to inventory, classification and cataloging. Utilization of applications for processing digital-based library materials, namely SliMS. However, using the SliMS application is not a solution for school libraries. Rather, it is a new challenge that allows library staff and schools to face new problems. Like the SliMS application which often experiences problems with the server.

Apart from that, Senjaya and Susinta (2022) in their research revealed that librarians and university library staff are expected to be more proactive, creative and dynamic regarding technological developments that facilitate library activities. Especially libraries operating in educational institutions enable them to serve the academic community in searching for information that is useful in learning and research. Apart from that, Kesuma, Yunita and Meilani (2021) in their research added that in the era of point 4.0, university libraries should utilize technology that can make it easier to search for information for library users. Utilizing technology in libraries, for example by developing the SliMS application. The use of SliMS has been widely implemented in university libraries. This is due to the many positive impacts that the SliMS application has, one of which is in processing library materials.

Previous research conducted by Prayoga, Bakri, and Rahmanto (2020) stated that library automation is a system that converts conventional library activities into digitalization. Automation can provide faster, more precise and accurate information retrieval with OPAC. However, apart from that, in research conducted by Andi, et al. (2022) said that users are not

competent in operating OPAC in information retrieval. This occurs due to ineffectiveness in socializing the use of OPAC to users. Apart from that, there is a lack of attention from library staff in inputting data. This problem causes many users to go straight to the shelves in search of information.

Based on the explanation and previous research above, researchers are interested in researching the processing of digital-based library materials in school libraries. The aim is to reveal the challenges that school libraries face when dealing with the application of technology in libraries. Apart from that, this research tries to examine the process of processing library materials in school libraries. Where this processing is carried out simply without following the theoretical process. This research focuses on the library of SMAN 1 Cileunyi. The things that will be studied are human resources in school libraries, facilities that support the processing of digital-based library materials, school library collections.

Library Automation

According to Wahyudi (in Pratama, 2013), library automation involves the use of computers in managing all library activities, including procurement of library materials, data processing, and services to users. A similar opinion was also expressed by Sulistyono Basuki (Sulistyo, 1991), who described library automation as the application of information technology in all aspects of libraries, starting from collecting collections to providing information services for visitors. The objectives of library automation stated by Cochrane (Pratama, 2013) are as follows:

1. Facilitate the integration of library activities.
2. Helping collaboration and developing library networks.
3. Support efforts to prevent overlapping library activities.
4. Reduce monotonous and boring routine work.
5. Expand the services offered by the library.
6. Provide opportunities to promote library services.
7. Increase overall productivity.

In implementing library automation, an information institution must consider several important elements (UNESCO, 1999). The library automation system consists of several components that are interrelated and support each other.

Library Material

Library materials are an important component in every information system, including libraries and other information units. Along with advances in information technology, library material collections are no longer limited to printed form, but also include non-printed materials. This non-print material includes various types of audio-visual media such as sound recordings, video recordings, graphic materials, and cartographic materials such as maps and atlases. Apart from that, libraries also have digital collections such as CD-ROMs, electronic books (e-books), and electronic journals (e-journals) as part of the available information sources (Yulia, 2014a). In this way, library users can easily access information resources without being constrained by physical boundaries or location, resulting in a more dynamic and globally connected learning environment.

According to Soejono (1987), library materials include various types of material that can be used as sources of information and learning. These include books, serial publications, theses, brochures, catalogs from publishers and educational institutions, examples of tests or test

standards, as well as audio-visual materials such as films, film strips, slides, pictures, sound recordings, vinyl records, globes, maps, posters, models and various other materials.

RESEARCH METHOD

The methodology used in the research is qualitative research methods. Descriptive qualitative research techniques are research techniques that combine two qualitative research techniques and descriptive research techniques. Descriptive qualitative research techniques utilize qualitative data and explain it descriptively. This research technique aims to describe and analyze a phenomenon that occurs in people's lives (Sugiyono, 2016).

The research object of the research is the school library of SMAN 1 Cileunyi which is the library of one of the favorite high schools in Bandung Regency which is accredited B. Using data collection techniques, namely observations carried out by analyzing, reviewing and observing directly the research object, namely SMAN 1 Cileunyi library by analyzing the condition, facilities, type of collection, use of computer equipment, application of information and communication technology, and collection processing. Apart from that, an interview was also conducted with one of the librarians at the SMA 1 Cileunyi library.

In the data collection stage using interview techniques which became research information, there were two library staff who structurally held the library's constraints. These two informants do not function as teachers and are actually library staff. The first informant is a graduate of Library Science at Padjadjaran University. In terms of educational history, he has knowledge of libraries. Apart from that, he often takes part in school library training. Meanwhile, the second informant has a history of education in administration. Even though in his educational history he has experience and knowledge regarding data. However, in actual library activities he did not have a scientific history. However, he has quite a long working experience and is very familiar with the state of the library at SMAN 1 Cileunyi.

RESULT AND DISCUSSION

Human Resources in the Library at SMAN 1 Cileunyi

Ideally, school libraries should be managed by librarians who have formal education in the field of libraries, but in reality, many school libraries are managed by teachers at the school. This situation causes teachers who act as library managers to have to bear additional burdens. Apart from carrying out their main role as educators, they also have to take care of administrative tasks and collection management in the library (Arias & Fatmawati, 2013).

School libraries often face challenges in finding staff who have the knowledge that suits their needs. This situation occurred at SMAN 1 Cileunyi, where they only had two library staff who were truly in the scientific field. However, with the various complex activities and tasks in the library, two staff are not sufficient. To overcome this shortage, school libraries must find the right solution. One of the steps taken was to assign library duties to three teachers who had relevant knowledge. While this step may provide additional help, it may still pose some challenges especially in dividing time and responsibilities between them.

Teachers who are given additional responsibilities as library managers are often referred to as "Teacher Librarians". They usually have undergone training or have education in the library field, ideally at least bachelor's level (S1) or 30 credits in that field (LASA HS, 2007). Teacher Librarians face great challenges in managing school libraries because they have

multiple responsibilities. On the one hand, they are in charge of teaching students, while on the other hand, they have to take care of various aspects of library management.

Although situations like this on the other hand can have a positive impact, for example teachers can collaborate with staff to develop and prepare material to be given to students (Azizah & Widodo, 2014). However, situations like this can cause several problems. One of them is the potential for conflict in roles and responsibilities between teachers who are also library staff. The lack of clarity in the distribution of tasks and time between the three teachers involved could also be a human resource problem in the SMAN 1 Cileunyi school environment. Apart from that, the sustainability of the quality of library services can also be affected due to the lack of focus and specialization of the actual library staff (Supiani et al., 2022).

In the library at SMAN 1 Cileunyi, the teachers who are library staff do not have a scientific background in libraries. They only watch, observe and learn autodidactically from library staff who have a scientific background in libraries. In this way, the process of processing very complex library materials cannot be carried out properly. This includes providing important descriptions such as title, author or writers, publisher, year of publication and other important descriptions that cannot be implemented properly. The library only stamps books that say "SMAN 1 Cileunyi Library".

That way, it is clear that the use of library automation such as OPAC is not implemented. Library staff who have library knowledge also provide information through interviews that they are not competent in operating library automation, for example SliMS. Apart from that, because many library collections only consist of textbooks, they think there is no need to implement OPAC or other library automation. If they develop the processing of library materials theoretically and are oriented towards specified steps. The library of SMAN 1 Cileunyi is consumed by time and energy which allows priority activities to be sidelined.

Facilities That Support Digital-Based Processing of Library Materials

The library at SMAN 1 Cileunyi is quite advanced compared to other school libraries. This is proven by the condition of the premises, facilities, services and library collections which are very good and suitable for use. The shelves are neatly arranged, there is a place for studying or other activities for the academic community, the collection is relatively large with a variety of subjects, the service provided to users or the academic community is very good and meets user satisfaction.

In the library at SMAN 1 Cileunyi, all forms of library activities such as information processing, procurement of collection materials, and services are provided well and in accordance with existing regulations. However, in the process of its activities, the SMAN 1 Cileunyi library still uses conventional. So, it can take a lot of time and energy. In library collections, the use of cataloging is still not effective because there are still library collections that do not have call numbers on the collection materials. Apart from that, there are still several collections that are not listed bibliographically in the library. Library collections such as subject books are stamped on the first page, middle page and back page to state that the collection belongs to the SMAN 1 Cileunyi library.

The network that supports library digitization in this library only has one computer. The available computers are also used to recapitulate collections only. Not used for the cataloging process in library collections. In this way, inputting collections as a requirement for cataloging cannot be done properly. Apart from that, the conventional cataloging process in the SMAN 1

Cileunyi library is not implemented. From the results of the interview, there was no process for filling out the biodata form on paper to produce a catalog card.

As stated by UNESCO (1999), developing library automation requires hardware in the form of computers. Even though the library at SMAN 1 Cileunyi has computers, software development such as the SliMS application has not been implemented. Apart from that, library staff do not yet fully understand the use of SliMS. Researchers consider SliMS too complicated for the SMAN 1 Cileunyi library. Apart from the condition that users do not require the use of technology, SMAN 1 Cileunyi does not provide digital-based library material processing facilities.

Apart from that, another obstacle that is a challenge for the SMAN 1 Cileunyi library is inadequate space for computers. This is because libraries are often faced with sending a large collection of textbooks, so the room is full of books that need to be processed. In terms of funding, automation also costs a lot of money. In fact, it is many times the collection required by library users at SMAN 1 Cileunyi. Apart from financial considerations, the SMAN 1 Cileunyi library also measures the effectiveness and efficiency of library automation. Does it suit user needs, is it long term, doesn't cause new problems, or something else? In addition, the library does not have a national format cataloging system. They adopted cataloging as simple as possible. The cause is none other than inadequate facilities.

According to the opinion expressed by Harmawan (2016) in his article entitled "Library Automation Systems" and Rodin (2013) in his article entitled "Opportunities and Challenges for Library Automation in Indonesia", the obstacles in the library automation process are as follows:

1. Misconceptions about library automation

This misunderstanding occurs marked by the fear of shifts in tasks and functions being replaced by the system. However, in reality, the system only makes things easier without eliminating library staff. Besides that, it is believed that the costs of library automation are very large, even though the efficiency gained from automation can offset the costs.

2. Lack of trained staff.

The lack of trained staff in the field of information and communication technology is a challenge in itself, but librarians can gain understanding through independent learning.

3. Lack of support from leadership

Lack of support from leadership for library progress, especially in the field of automation, is a serious obstacle for library managers.

4. Input funds

Data input problems are also a serious obstacle, especially if the amount of data is large, because it takes quite a long time and can cause failure in implementing library automation.

SMAN 1 Cileunyi Library Collection

School library collections are often dominated by books on subjects related to the current curriculum (Supiani et al., 2022). Curriculum changes that occur periodically cause libraries to continuously update their collections in accordance with new curriculum needs (Yulia, 2014b). This requires library managers to always monitor and adapt their collections so that they remain relevant to changes in the curriculum and student learning needs.

The Department of National Education (now the Ministry of National Education) issued a policy that determines the period of use of textbooks for five years through Permendiknas Number 11/2005 Article 7 paragraph (1) each educational unit (SD/MI, SMP/MTs, SMA/MA and

SMK) determines school level policy by decreeing textbooks that will be used in the school within a period of 5 years.

From the statement above, this could be the reason why school libraries often carry out weeding and shelving activities. Weeding is one aspect of collection development, a follow-up to collection evaluation activities (Singer, 2008). Weeding activities include selecting library materials from the shelves by considering physical suitability, collection contents, number of copies and other things (Pebriani & Jumino, 2019). Based on interviews with library staff at SMAN 1 Cileunyi, they often carry out weeding when there are book deliveries and changes in teaching materials based on the teacher. The time span for weeding is usually every semester change. However, in several situations the implementation of weeding at the SMAN 1 Cileunyi library is erratic. This is based on the arrival of books when the school procures subject books. According to Rusmana (2001), the factors that influence weeding are physical damage to library materials, indications of collections that are prohibited by the government, and a relatively large number of copies.

This weeding process is very labor intensive, this is due to the large number of copies of each book title. Apart from that, the conditions from shelf to shelf are quite narrow. In this weeding process, it is usually carried out only by two library staff who structurally hold the library constraints without holding concurrent positions as teachers. When conducting weeding, library staff ensure that the collection has gone through a selection process involving the subject teachers concerned. After that, library staff determine the number of copies that will be weeded. After that, the withdrawal is carried out, the collections that have gone through the withdrawal process are put on the shelves in large cardboard boxes, then given information such as title, author and number of copies.

Meanwhile, shelving is the arrangement of library materials on shelves which is applied in libraries that provide open services. This preparation is based on regulations to make it easier for readers to find the collections they need (Sulistyo, 1991). This is done after the weeding has been carried out. Before shedding, of course the library must process library materials as best as possible. However, in the library at SMAN 1 Cileunyi the library staff only ensures that the collection is in accordance with demand, suitability of purchase and delivery, and most importantly tasting. The shelving process also considers the number of copies of each collection according to user needs. Usually adjusted to the number of students in each class and exceeded by four or five copies. Apart from that, the arrangement of the collection is a change of collection. This means that when a type A sociology book is issued it will be replaced with a new one. However, on the other hand, the library shelves are inadequate, resulting in a buildup of cardboard boxes in the library.

Weeding and shelving activities for the library at SMAN 1 Cileunyi are very burdensome because the number of human resources is insufficient, resulting in the work taking a long time. Apart from that, this activity often occurs suddenly. Continuous deliveries of books and changes in books as well as changing curricula mean that they rarely process library materials optimally. Especially in cataloging activities at the bibliographic description stage.

CONCLUSION

The presence of library automation aims to make it easier for school libraries to manage their libraries. Especially the lack of human resources and expert staff makes it possible for work in the library to be helped. Library material processing activities that have many steps make school libraries spend a lot of time and energy. So they do not pay attention to the theoretical,

practical, and even standardization steps in processing library materials. In this way, the presence of library automation which enables digital-based processing of library materials does not present a solution but rather a significant challenge.

SUGGESTION

The suggestions that researchers recommend are:

1. Library efforts to improve cataloging and management of library materials can begin by providing training to library staff or looking for additional human resources who have expertise in cataloging.
2. Libraries can consider improving facilities that support the management of library materials, especially those related to technology. This includes investment in digital-based library management systems such as OPAC and other supporting software.
3. Libraries can collaborate with other libraries or related educational institutions to share resources and experiences. Through collaboration, libraries can obtain additional support in collection management and technology updates, as well as exchange best practices in library management.
4. It is important to increase awareness and use of libraries among students and school staff. By holding promotion and training programs on the use of library management systems, libraries can increase the use of their facilities and strengthen their role in supporting learning in schools.

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