

Preservation and Conservation of Library Material

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Abstract:

In third world countries, Libraries despite the restrictions of finance confronting them still make huge investment on acquisition of library resources. One of the greatest challenges are deterioration of library resources which plaguing the libraries. From a massive loss of her heritage, it should be savage these library resources and libraries and these study examines preservation and conservation of library material. The library security is most used measure of preservation and conservation practices that is reveal by finding. The deterioration of library material has greatest causes which is dust and particular matter. The finding further revealed that dusting, cleaning and proper shelving are major techniques which is adopted by libraries. In this study, examined the causes of deterioration patterns of library and evaluates the preservation and conservation techniques.

Keywords: *Preservation, Conservation, Libraries, Shelving*

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Introduction

Library is an essential facility and repository of knowledge of any educational institution burdened with the responsibility of broadcasting knowledge to the people without any discrimination. A well-equipped school libraries are provide crucial education and general information that is need of teachers, students and its community. A library is one of the social institution that have primary role of organizing, preserving, acquiring, processing, as well as conserving the print and non-print information resources for users. School library play primary role of organization, acquisition, storing, processing (cataloguing and classification), preservation and dissemination of information resources to students, staff and its community users. Library is used by public or a target group which have the collection of books and other forms of recorded information purposefully selected and systematically organized and preserved by qualified library employees.

Preservation is defined as “activities associated with maintaining library and archival material for use either in their original physical form or in some other usable way”. Preservation is tend to include conservation but it contain comprehends techniques of partial preservation of physical object as well as procedures for the substitution of the original artifact by material conversion, whereby intellectual content of original is at least partially preserved. One aspect of preservation activity is conservation that indicates the active use of preventative measures, or processes to repair damaged material and ensure the continued existence of individual items. Library and information management contain important aspect that is preservation and conservation practices and techniques of library. Any loss of such material is simply irreplaceable; therefore, preserving this cultural heritage, intellectual becomes not only the academic commitment but also the moral responsibility of librarians/information scientist who are in charge of these repositories. Book repairs, bookbinding, conservation treatment and emergency preparedness and response are included in conservation. In conservation department, deterioration materials are needed to repair by binding or protective enclosures.

Library material facing basic challenges that is deterioration of information materials which are prone to wear and tear, cracks, wrapping, shrinkage, brittleness, discoloration, hole, dust, bio-infestation, abrasion and dirt accumulation. Collected material are deteriorate have some external factors including poor handling or storage, theft or vandalism, fire and flood,

pests, pollution, light and incorrect temperature and relative humidity.

External Factors causes Deterioration

This type of deterioration contain main elements which are actions of moisture, light, heat, pollution, temperature, photocopying, relative humidity, poor handling of information resources and biological agents such as moulds, insects, fungi, rodents, bacteria, natural disaster such as water, earthquake, fire, man such as theft, poor handling and storage. In some library and archives, poor handling of information resources in perfect binding and included some other factors such as light, flood, dust, and rain.

Moisture

Against the preservation of library information resources, moisture do works very well-being. In paper and vellum, certain amount of moisture is necessary for flexibility like too little moisture makes paper brittle but excess encourage mould growth. Temperature and high humidity accelerates the failure of adhesives. When moisture is present, mould spores are in air and can only establish colonies on a surface. The greatest concern to librarians because naturally high humidity in tropical and subtropical regions in world. By high temperature, fungi can be destroyed and temperature from such as heat, oven and fungicides and most effective treatment is control the moisture which is necessary for their growth.

Heat/Temperature

Three conditions for microbial growth that are Heat, Food and Moisture and these accelerate the chemical deterioration of paper, leather, iron and textiles materials. By hydrolysis, cellulose fibers are deteriorated in which decomposition occur by chemical reaction with water, oxidation and photosynthesis and these process is accelerate by heat in the presence of minute of copper, iron and other impurities that are always found in paper. It is improve by low temperature and low humidity due to which decrease the rate of deterioration. In library, it suggest that low temperature area with prolong life span of library information resources.

Light

Light sensitive materials such as books and other paper-based information resources. According to this paper, ultraviolet radiation and visible light causing dislocation, fading and embrittlement to library information resources. But incandescent light is least destructive, artificial light takes a little longer to deteriorate paper materials. By reducing the quality of

light falling on any of these information resources, sunlight damages are minimized. The quality of light transmitted by windows is controllable with curtains, tinted glass, shades and louvers.

Pollutions

On most library information resources such as book formats, dust usually encourage the growth of micro-organisms. Most school libraries are situated where dust prevailing. It have no doubt on that dust to enter the libraries through windows and doors that is turn aid fast deterioration of library information resources.

Human Factor

In libraries, human factors are most important factor because improper handling and storage practices created the deterioration of library. Students and peoples are need to continuous practice on library information resources handling to avoid poor handling and shelving, mutilation and defacing of these vital information resources in libraries.

Insufficient Space

In storage area of information resources have lack of adequate space that is a threat to resources as it facilitates quick deterioration of paper among others. Due to lack of adequate space, leads to resources packed under tight conditions which is leads to heat among them which is not good for resources because there is no adequate ventilation.

Biological agents/Factors

Due to high humidity, create the condensation or moisture and there is always presence of biological growth such as contained in protein and carbohydrates in the form of sizing, paste or starch and other organic substance attractive to insects. The level of damage depends not only on insect and material but how too promptly infestation is controlled and discovered. Complete destruction is occur by few holes that may have common types of insects which attack on paper, these insects are: Termites, Cockroaches, Silverfish, Booklice, Bookbeetles and Booklice.

Disasters

Due to disasters, damage or destroy a few items or entire collections that can result from fire, earthquakes, storms, flooding and broken steam pipes. Against loss from disaster, Vigilance, preparedness and recovery plans are best guards. From hazards of a hostile environment, all of the factors threatening archival collections is informed action to protect and safeguard materials. In library and archival preservation programmes, controlled environment and proper storage procedures are important components.

Techniques of Preservation and Conservation of Library

To preserving of information resources in library that are usable which is as follows:

- Repairs
- Air Conditioning
- Fumigation
- Firefighting equipment
- Reformatting
- Binding
- Proper storage
- Use of insecticides
- Digitization
- Photocopying/duplication
- Storage of books away from light
- Application of fungicides
- Encapsulation
- Deacidification
- Microfilming
- Digitization
- Insurance
- Lamination

Preservation policies at Library

According to International Organization for Standardization (ISO), "All the organizations need to identify the regulatory environment that affects their activities and requirements to document their activities". The application of regulatory environment to their business processes are reflected by policies and procedures of organization. In records of its activities, an organization should provide acceptable evidence of its acquiescence with the regulatory environment. By library, a well formulated preservation and conservation policy is developed by finding study. The policy specify that "recognize the important of monitoring and identifying the condition of our collections and high quality conservation procedures form a central theory of a preservation and conservation programme. It is also recognize to prioritize conservation treatments that is based on conservation requirements, access issues and

objectives of the collection policy". The policy aims to "provide a comprehensive statement of intent regarding the care of current and future archive and special collections under the management of the University Library. It aims and objectives outlines for preservation and issues to be considered and it also have to inform preservation activities for all Universities Library collections and it contain the plan of action for safe keeping".

Paper based Documents are preserved

Preservation of paper-based collection of library such as books, journals, maps etc. that is meaning of preservation of paper based documents. Preservation of paper-based documents have two basic principal methods, first one is preservation of original format by number of techniques such as good care of handling that is combined with sound protective storage; cold storage for selected materials conservation and restoration treatment and mass Deacidification. Second one is reformatting, in which complete conversion of material into other format is done to preserve the library's collections. It also include digitization and microfilming.

Digital-based Documents are preserved

In digital form, digital based documents are preserved by which digital data in order to ensure the durability, usability and intellectual integrity of the information contained therein. Digital resources are preserved by using four approaches or strategies which are: refreshing (periodic copying from one physical medium to another), technology preservation (replicating any old configuration of hardware and software), migration and encapsulation.

Preservation of Information Resources

In the process of managing information resources, preservation is a crucial element in the library. The main of preservation is to extend the life span of information resources. For deterioration and decay of information resources, several factors are responsible in libraries. To preserve libraries, its responsibilities given to the maximal use of teachers, students and its communities. Some factors are responsible for loss of information resources from libraries include high temperature, biological agents, environmental condition, human agents and both natural and artificial disaster. Preservation of information resources divided into two aspects:

- Preventive measures and Curative measures

Preventive measures: It include all forms of indirect actions that have aimed at prolonged the life span of library information resources. It consists of all

methods of good house-keeping, dusting, caretaking, use of humidifiers, installation of thermometer and fire extinguisher, periodical supervision and prevention of any possibility of damage by biological, physical, chemical and human factors. Curative measures: It include all forms of direct actions that have aimed at prolonged the life span of library information resources that includes mending, Deacidification, repairing and fumigation of information resources in library.

Review of Literature

Olatokun 2008, stated that institutional libraries are used the digital method to preserve the library materials for stay a long time in meeting information needs of users. In libraries and archives, digitization method is widely used to find the solution of problem of information preservation. This method is tremendously expensive and for practical point of view, it is costly to implement and costs are in form of software and hardware, user training requirements, manpower to sustain system, converting archival materials to machine-readable form and maintenance. Such polices of preservation and conservation of library resources need to be implemented and reviewed from time to time to cater for new challenges and emerging technologies.

Ogbodo 2011, concluded that examining the preservation of information sources that is found out the problem of preservation of information resources in polytechnic libraries. For preserving the polytechnic library, using such methods repair, binding, air-conditioning, use of firefighting equipment's, fumigation, proper storage and photocopy/duplication, use of insecticides and storage of books that is away from light modern technology. The improvement of preserving information sources have some strategies that are proper handling, planned housing/storage environment, capacity building formulation of preserving policy and insurance.

Segaetsho and Mnjama 2012, the preservation and conservation policy was developed in 2005 for library by archivist Ms Gemma Bently. The finding revealed that the university and colleges holds an extensive collection of books and pamphlets. In this paper, finding the study that indicate the major challenges include mutilation of library materials by thefts, users, lack of well-defined disaster attentiveness plan and pests. It also find that system does not have in place to monitor this gas pollution effects and this might be contributing to material deterioration.

OGUNSOLA 2016, in multimedia libraries, need to preserve material that is imperative because documents are susceptible to both inherit and

environment factors which is combine to degrade such material. In multimedia libraries, material contain information for communication, entertainment, research and socio-economic growth of people, they must be professionally preserved to be able to meet the purposes for which they are acquired. Prints material are preserved through humidity control and temperature regulation but non-print materials are preserved under more rigorous preservation and storage condition, proper handling and disaster management controls. The preserving the libraries by using methods in non-book materials are; cleaning, installing air conditioner, shelving and adequate security.

Ambika and Begum 2017, dictated that most of the colleges and universities library are suffering from lack of funding, improper infrastructure facilities, lack of knowledge about of preservation and conservation, techniques, practices, untrained manpower skills how to handle the preservation and conservation techniques, no written policy, outward hardware and software, administrative problem etc.

Osunride and Adetunla 2017, stated that this study has concluded that due to the lack of proper

preservation and conservation practices in Universities and colleges, causes of resource loss and deterioration. Greatest cause of information resources deterioration, dust and particulate matter was found. Greater relative humidity, high acidity level, wear and tear mark and high temperature level have significant effect on library material.

Conclusion

Over the year, Preservation and Conservation of library information resources is very important for any library. Libraries have done own very best to overcome the main challenges of preservation and conservation of information resources. Libraries are deteriorate by some external factors like light, pollution, pest, human factor etc. for which apply the technique due to which some deterioration are removed. In some universities and colleges, library staff were not have opportunity for inter-state training or international training on preservation of information resources. Library can be utilized in their best way to keep the library in a good way by giving orientation to them frequently about everyday care and handling with preservation and conservation.

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