
TRENDS IN E-COLLECTION DEVELOPMENT IN ACADEMIC LIBRARIES : A STUDY

C.Sasikala¹, G.Nagaratnamani² & V.Dhanraju³

¹Department of Library & Information Science, Andhra University, Visakhapatnam, India
E-Mail: prof.csasikala@gmail.com

²Librarian, Knowledge Resource Center, GITAM University, Visakhapatnam, India
E-Mail: gnrmani@yahoo.com

Assistant Professor, Department of Library & Information Science, Andhra University,
Visakhapatnam, India, E-Mail: dhanuvr@gmail.com

ABSTRACT

States that academic libraries which are considered to be nerve centers of academic and research activities must help achieve the academic goals of their parent institutions and this is possible only through developing adequate library collection and/or providing seamless and wider access to relevant electronic resources. This paper chiefly investigates the trends in collection development activities in university and college libraries. Further the contemporary changes in scholarly publishing and advances in Information and Communication Technologies are posing challenges to library professionals in developing and making them accessible to the end users. It also examines the status and management of electronic resources in academic libraries surveyed and enlists the challenges before library professionals in the changed context. It also explores the collaborative initiatives taken up by these libraries and the perceptions of the library professionals on collaborative collection development.

KEYWORDS: Collection Development; E-Resources; Academic Libraries

Introduction

Collection development is one of the important and challenging library management activities. Collection development is concerned with the formulation of a systematic plan to build a library collection which will meet the needs of its users. It encompasses a number of activities related to the development of the library's collection including the determination and coordination of selection policy, assessment of current and potential user needs, collection use studies, collection evaluation, identification of collection needs, selection of materials, planning of resource sharing, collection maintenance and weeding (Gorman and Howes, 1989; Clayton and Gorman, 2001).

Review of Literature

The review of literature reveals the findings of number of studies on various aspects of collection development. Forecasting the impact of electronic environment and the economic forces on collection development, Evans (2000) stressed the need to have a collection development policy in the context of hybrid collections to delineate the purpose and contents of a collection relevant to its users as a whole. Further a well written Collection Development Policy typically identifies subject areas in which it may be preferable to have one format over another (Lee and Wu, 2002). Tucker and Terrence (2004) observe that there are many challenges facing new librarians in the academic environment, including collection development. This article analyzes the topic of collection development and how it relates to new professionals in the field of librarianship. Maharana and others (2004) reported about the collection development methods and practices in vogue among the libraries in Kolkata, India.

The study by Hsieh and Runner (2005) includes a survey targeting academic collections development and acquisition librarians and an analysis of academic collection development policies. Also, the study describes treatment of materials, library policies reasoning, impact of faculty and students on policy changes and other related factors. Mandal and Panda (2005) have described different dimensions of collection development with specific reference to Engineering College Libraries. The paper by Vignau (2005) is based on both research about collection development policies and data compiled as a result of a survey of 16 centers of higher and technical education in Cuba. Wittenbach (2005) proposes the restructuring of collection development at the University of California and Riverside University Libraries. Ameen (2006) discusses various kinds of managerial and practical issues pertaining to collection development and acquisitions to collection management. Vignau and Susana (2006) have discussed the Collection development in a digital environment and have mainly focused on user-oriented concept of development in digital collections. Since the literature on collection development is vast, only selected publications have been quoted here.

Methodology

This study is a survey of college and university libraries in the state of Andhra Pradesh, India. The survey sought to determine the nature of the collection, procedures and policies followed to develop collections, nature and composition of e-resources, budget allocations for them, their selection, access, evaluation and withdrawal procedures and policies and the type of collaborative activities they are involved in.

Objectives of the Study

The following objectives have been pursued for the purpose of the study on collection development,

in selected college and university libraries of Andhra Pradesh,

1. To collect information regarding the collections in select college and university libraries located in Andhra Pradesh and also to examine the budget for printed documents as well as e-resources.
2. To examine and study the collection development policy of college and university libraries in terms of electronic documents.
3. To critically study the selection criteria, acquisition process and to examine the weeding out or de-selection criteria of the documents.
4. To reveal the present status of print, non-print, and e-resources in the libraries under study.
5. To examine and evaluate collection development policies of the college and university libraries.
6. To find out details regarding the nature of allocation of funds for print and e-resources and the impact of economic factors on fund allocation.
7. To survey the perceptions of library professionals on various aspects of collection development including collaborative activities.

Survey Findings

The following sections describe the findings of the survey of college and university libraries.

Nature of the Sample

The survey covers four state university libraries, four central university libraries, one private university library and nine college libraries functioning under private management. Out of them, highest percent (77.77%) of libraries are established between the years 1951 to 2000.

Collection Development of E-Resources

Type of E-Resources Available

In addition to finding details about print resources, the present study has also focused on e-resource collection development. In order to know what types of e-resources are accessible through the libraries the related data has been gathered and presented in the following Table 1.

Table 1: Types of E-Resources Accessible

Types of E-resources	Number of Libraries (%)
CD -Rom collections	18 (100.00%)
E -Journals	18 (100.00%)
E -Books	06 (33.33%)
Online databases	04 (22.22%)
In -house Databases	18 (100.00%)
Any other, please specify - E learning material	12 (66.64%)

It is found that all the libraries surveyed have CD-ROM collections, access to e-journals and in house databases (100%). About 44 percent libraries are providing access to online databases where as access to e-books is provided by only about 33 percent of the libraries. Among others, nearly 67 percent of the libraries are found to be providing access to e-learning materials to the academic community.

Means of Providing Access to E-Resources

There are different ways of providing access to e-resources. Each library may adopt more than one way of providing access to choose the options they are adopting to provide access to e-sources to their library users.

Table 2: Means of Providing Access to E-Resources (more than one answer)

Means of Providing Access to E-Resources	Number of Libraries (%)
UGC -INFLIBNET	08 (44.44%)
AICTE -INDEST	10 (55.55%)
Institutional website	13 (72.22%)
Library home page/website	02 (11.11%)
Intranet	05 (27.77%)
Web OPAC	04 (22.22%)
Campus Network	05 (27.77%)
Any other, please specify.	---

Among various means of providing access, majority of the libraries are providing access to e-resources through their institutional website (72%). The second highest percent (55%) are able to facilitate access to e-resources through AICTE-INDEST Consortia. About 44 percent of libraries are accessing e-journals and databases through UGC-INFLINET Consortia. Through Intranet and campus network (WAN) also access to in-house databases and CD-ROM sources has been provided by nearly 28 percent of the libraries. Access to in-house databases through Web OPAC is made possible by 22 percent of the libraries.

Criteria Applied for Making Decisions on E-Collections / Subscriptions / Purchases

As in the case of printed sources, the decisions on e-collection development depend on different factors. The following table reveals the list of factors that aided in decision making on collections.

Table 3: Factors Influencing the Decisions on E-Collection

Types of E-resources	Number (%)
User request	11 (61.11%)
Librarian choice	07 (38.88%)
Research projects	08 (44.44%)
Course curriculum	14 (77.78%)
E -resource offers via online	
1. E -mail	06 (33.33%)
2. List Server	04 (22.22%)
Regular mail	05 (27.77%)
Any other ,please specify	---

A number of factors that aid in selecting and subscribing resources are listed in the table above. Highest percent of the librarians (nearly 79%) are making the choice of required e-resources based on the curriculum of the courses offered by the institution. Another 61 percent are making decisions on e-resources as per requests from users. Based on the research projects, about 44 percent are taking decision on e-resources. Some of the librarians are motivated by online e-resource offers in the form of e-mails (33%) and list serves (22%) in selecting the e-resources for their users. In the case of 39 percent of libraries, decisions on the choice of e-resources are made by the librarian.

Processes Involved in Purchasing or Canceling E-Resources

For developing e-collections, providing access to them, archiving, evaluating and withdrawing or canceling them-all these activities can be performed with or without following standard process laid down. Details about the process followed by libraries in e-resource purchase or cancelation are presented in Table 4.

Table 4: Processes Involved in Purchasing or Canceling E-Resources

Process	Number (%)
No particular processes	06 (33.33%)
Informal processes	07 38.38%)
Definite process	05 (27.77%)
Total	18 (100.00%)

The responses of librarians reveal that majority of the libraries are following informal process for both purchasing and cancelation of e-resources. No particular process has been adhered by 33 percent for this purpose. Only 27 percent of the librarians are found to be depending on definite processes for purchase or cancelation of e-resources.

Existence of Collection Development Policy

For systematic and effective development of library collections, a library always needs policy document reflecting the objectives, nature, scope and purpose of the collection to be developed and managed. The guidelines in the form of policy document assist the librarian in developing value added collection. In order to find out whether libraries surveyed are guided by any policy document on developing e-collections, details are collected, analyzed and presented in the following table.

Table 5: Collection Development Policy Adopted by the Library

Types of Collection Development Policy	Number (%)
Specific policy	--
Part of general collection development policy	10 (66.66%)
Do not have collection development policy	08 (44.44%)
Format dependent policies	--
Any other, please specify	--

The analysis of responses indicates that none of the libraries have specific policy on developing e-resource collection. The guidelines for developing e-resources are part of the general collection development policy in the case of 66 percent of the libraries. 44 percent were found to be not having any collection development policy.

Decisions Regarding E-Resources

The present survey has also attempted to find out the persons responsible for making decisions on the selection of e-resources. The responses of librarians were analyzed and presented in the following table.

Table 6: Decision Making on E-Resources

Decision making authority	Number (%)
Librarian alone	03 (16.66%)
Committee of librarians	--
Electronic Resource Committee	02 (11.11%)
Teaching faculty alone	02 (11.11%)
College management	04 (22.22%)
Any other, please specify	07 (38.88%)

In many of the libraries (38.88%), it is observed that the librarian, college management, teaching faculty and committee together are taking decisions on developing e-resources in their libraries. College management is responsible for all the decisions related to e-resources procurement in the some of the colleges (22.22%).

Methods of Procuring E-Resources and Making Them Accessible

E-resources can be made available to the users through different means. The responses analyzed shows different ways adopted by librarians to ensure e-resources access.

Table 7: Methods of Acquiring E-Resources

Channels	Number (%)
Vendors/Publishers	12 (66.66)
Distributors	04 (22.22)
Gift/Donation	-
Exchange	-
Membership	05 (27.77)
Free downloads from WWW/Internet	08 (44.44)
Any other, please specify	-

It is evident from the responses that majority of the libraries are getting access to e-resources through publishers and vendors of e-resources by subscribing to them (66.66%). By downloading freely available e-content from WWW, about 44 percent of the librarians are providing access to them. Through membership in a group, some of the libraries (nearly 28%) are able to provide access to e-resources.

Use of Specific Set of Criteria to Evaluate the Web Resources

While judging the quality and utility of e-resources, as in the case of print resources, a set of evaluation criteria has to be applied. The following table indicates whether or not the libraries surveyed are applying any evaluative criteria for purpose.

Table 8: Use of Criteria to Evaluate Electronic Resources

Response	Number (%)
Yes	10 (55.55)
No	08 (44.44)
Total	18 (100.00)

The responses revealed that 55 percent of the libraries are applying a check list of points to evaluate the e-resources for which access is provided. However, 44 percent of the libraries are not using any criteria for evaluation of e-resources.

Criteria Applied for Evaluation of E-Resources

It is observed that more than half of the libraries are using a set of evaluation criteria to evaluate e-resources. The following table highlights the type of criteria applied by the librarians for evaluation purpose.

Table 9: Criteria Used for Electronic Resource Evaluation

Channels	Number (%)
Quality(based on reviews, user needs etc)	12 (80.00%)
Subject relevance	15 (100.00%)
Currency, authority and completeness	10 (66.66%)
Language	11 (73.33%)
Uniqueness of the content	10 (66.66%)
Relevance of materials for curriculum	11 (73.73%)
Relevance of materials for faculty and research	12 (80.00%)
Cost effectiveness	07 (46.66%)
Trial before use	13 (86.66%)
Network compatibility	10 (66.66%)
Hardware and software compatibility	08 (53.33%)
Strength of search engines/access	06 (40.00%)
Remote accessibility	11 (73.33%)
Others, please specify	---

Among 13 criteria listed in the questionnaire, highest percent (100%) of libraries have checked for subject relevance to evaluate the collection. Verifying the content and coverage of the e-resources through trails before purchasing them has been noticed amongst 86 percent of the librarians. About 80 percent gave importance to quality of the resource based on reviews available and needs of their users. 73 percent of the librarians verified the relevance of material for faculty and research, language of content and remote accessibility as part of evaluation process. Factors like currency, authority and completeness, uniqueness of the content and network compatibility have also been considered by 66 percent to evaluate the e-resources they want to make accessible to their users. About 46 percent of the libraries even asked for the type of access given by the online vendors to the back files to make decisions on subscribing to online databases or e-journals.

Criteria Followed to Cancel the E-Resources

The present survey has also assessed the criteria for used by librarians to cancel or withdrawal of e-resources.

Table 10: Criteria Based on E-Resources Cancelled or Discontinued

Criteria Followed	Number (%)
Usage statistics	12 (80.00%)
Budget	13 (86.00%)
Duplication	13 (86.00%)
Dissatisfaction with a resource	11 (73.33%)
Any other, Please specify	--

The analysis of responses clearly shows that while discontinuing or rejecting the e-resources, majority of the librarians (86%) are making decisions based on the budget allocation for e-resources on one hand and the duplication of items. Based on usage statistics and the dissatisfaction felt with the e-resources made accessible, 80 percent of the librarians are withdrawing access to e-resources.

Perceptions on the Role of Consortia in E-Collection Development

Consortia is a kind of cooperative and collaborative means of providing access or procuring the e-

resources through a coordinating agency. Perceptions of librarians on consortia based e-collection development and the use of consortia are presented in the following table.

Table 11: Perceptions of Librarian on the Role of Consortia in E-Collection Development

Perceptions	Number (%)
Only able to purchase through the consortia because of the discounts that are available	14 (77.76%)
Request consortia of research we are interested in	05 (27.77%)
Use consortia to save on time	08 (44.44%)
Use consortia to save on item they would buy any way	03 (16.66%)
Consortia are also a way for librarians to learn about what electronic resources are available	08 (44.44%)
Do you think due to consortia model, the role of selector is diminishing	09 (50.00%)
Virtual purchase of information sources limits the autonomy and change the role of the local librarian	09 (50.00%)

Highest percent of the librarians agreed that they are able to purchase e-resources through the consortia because of the discounts available with the packages (nearly 78%). Half of them (50%) felt that the role of selection is diminishing due to the consortia model. An equal percent of them opined that the virtual purchase of information sources limits the autonomy of the librarian and changes the role of the local librarian (50%). About 44 percent accepted that consortia help them to save on time in purchase activity and also enables them to learn about other electronic sources available in the market.

Perceptions of Librarians on E-Resources Collection Development

Perceptions on different policy issues related to e-resources collection development have been

ascertained and analyzed in Table 12.

Table 12: Opinion on E-Resource Collection Development

Perceptions	Yes	No
There is a need to for long range planning and a structured committee process for e-resource collection development	12 (66.66%)	6 (33.33)
There is a need for a check list of criteria for evaluation	10 (55.55%)	8 (44.44%)
The librarian is not able to devote adequate time on the criteria of such processes and selection criteria	6 (33.33)	12 (66.66%)
There is a problem in deciding quantitatively the level of use to consider for evaluating the usefulness of the library resources	8 (44.44%)	12 (66.66%)
Digital collection development requires more collaboration beyond libraries including IT developments and legal developments in the process	13 (72.22%)	5 (27.77%)
Collection development policy is influenced by changing access to information a). Changes in the model used by providers (ex: not offering institutional access) b). The changing and nature of the required items (ex: expensive industry databases and reports)	11(61.11%) 10 (55.55%)	7(38.88%) 8 (44.44%)
Exclusive awareness and knowledge is required to ensure access to electronic resources on the part of librarian	16 (88.99%)	2 (11.1%)
Library user needs guidance and training on the access and use of e-resources	14 (77.77%)	4 (22.22%)

Among different perceptions, majority of the librarians (nearly 78%) felt that exclusive awareness and knowledge is required to ensure access to electronic resources on the part of librarian. 78 percent of them also stressed that need for providing guidance and training to the library user on the access

and use of e-resources. Librarians also opined that digital collection development requires more collaboration beyond libraries including IT developments and legal developments in process (72%). Further nearly 67 percent emphasized the need for long range planning and structural committee process for e-resource development. According to them the collection development policy is influenced by changes in the model used by providers (61%) and the changing nature of required items (55%). About 55 percent felt that there is a need for a check list for evaluation.

Cost Effective Strategies in Case of Budget Constraints on Library

It is a known fact that some of the libraries are facing severe budget cuts. As a result it becomes challenging for librarians to develop balanced and value added information sources. In order to find out the strategies followed by the librarians to handle such situation, various options are given. The responses are analyzed and tabulated in the following table.

Table 13: Budget Constraints- Cost Effective Strategies Adopted

Strategies	Number (%)
Move from print and electronic subscriptions to e-only	8 (44.44%)
Cancel databases to eliminate duplicate content and retain databases with the most unique full text	7 (38.88%)
Break up e-packages and renew only the most used e-journals in a package	9 (50.00%)
Try to negotiate multiyear a package agreements(low prices, lower annual price increase caps	11 (61.11%)
Seek alternative open access content	8 (44.44%)
Consolidate subscription vendors for better pricing	12 (66.66%)
Consolidate software/access and management services to achieve better pricing	3 (16.66%)
Any other, please specify	-

More than one option has been chosen by the librarians. Highest percent of them (72%) wanted to become member of a consortium as a solution to the budget constraints. Second highest percent of them (nearly 67%) have thought about consolidating subscription vendors for better pricing. Another 61 percent of them wish to negotiate multiyear package agreements (slow prices, lower annual price increase caps). Half of them (50%) are thinking of e-packages and renew only the most used e-journals in a package. Another solution thought about by librarians (44%) is to move from print and electronic subscriptions to e-only subscriptions. An equal percent of the librarians are thinking of trying for alternative open access content. Only a few of them (16%) thought about consolidating software, access and management services to achieve better pricing.

Opinion on the Usefulness of Library Standards and Guide lines in Collection Development Process

Standards and guidelines are developed to bring uniformity and consistency in the procedures followed, services offered and physical facilities developed by libraries for sake of library users.

Table 14: Impact of Standards on Collection Development

Response	Percent
Yes	18 (100.00%)
No	-
Total	(100.00%)

The responses from the librarians clearly indicate the importance of standards and guidelines. All of them agreed unanimously that they are helpful in developing effective collections.

Usefulness of Standards in Collection Development

The librarians were also asked to indicate how the standards are helpful to them in developing library collections. The following table presents their responses.

Table 15: Perceptions on Usefulness of Standards in Collection Development

Perceptions of Librarians	Number (%)
provides a direction and helps in planning CD	15 (83.33%)
gives a frame work with scope	11 (61.11%)
helps in proper dispersal of resources	16 (88.88%)
helps in justifying the funds	15 (83.33%)
helps in maintaining uniformity in composition and size of the collection in similar type of libraries	14 (77.77%)
any other, please specify	-

The responses from the librarians showed that standards for collection development are helping them in different ways in developing library collections. Highest percent of them (nearly 89%) stated that the standards helped them in two ways by providing direction and help in planning collection development and in justifying the funds allocated, both in terms of sanction and also expenditure. More than 78 percent have also felt that standards help in maintaining uniformity in composition and size of the collection in similar type of libraries.

Suggestions

Suggestions offered by the librarians have been grouped and presented in the following table:-

Table 16: Suggestions Offered by the Librarians

Suggestions	Number (%)
Separate collection development policy for e-resources	16 (88.88%)
Separate budget for different types of e-resources	14 (77.77%)
Fixed budget for libraries form institutional budget	11 (61.11%)
Library staff should be trained in e-resources	12 (66.66%)
Staff should be more involved in CD programme	06 (33.33%)
Faculty should have more freedom to purchase	05 (27.77%)
To encourage the use of e-sources proper access facilities should be made available.	10 (55.55%)
To generate monetary resources for e-collection development, access to e-resources may be charged/priced	06 (33.33%)

Among various suggestions offered by librarians, majority nearly 89% stressed the need to have a separate policy for developing e-collections. Librarians also felt that category wise budget allocation should be there for collection development in libraries 77%. While 66 percent pointed out the need to train the library in managing e-resources, another 61 percent insisted for provision of fixed budget.

Conclusion

The present survey aimed at finding the trends in collection development activities among selected academic libraries. The sample consisted of both University Libraries and College Libraries. The findings of the survey revealed that as librarians added e-resources to their collections, they moved from selection as an individual activity to selection as a group activity. They started incorporating the new ways of selecting, subscribing and accessing new electronic formats in to the existing procedures. Further, with the advent of the Internet and the ability to simultaneously share virtual resources, cooperative collection development through consortia arrangement became popular among the libraries. The perceptions of librarians about ability of consortia to purchase products at a better price than individual libraries have made them very popular with funding agencies. However, the librarians also opined that as results of these developments, the role of selector has been diminishing in the collection development. It is also felt that as the purchase of e-resources, especially virtual resources increases through consortia arrangements the autonomy of the local library will decline and the role of library professionals will change considerably.

With regard to the library holdings, most of the collections are in print form. However, all the libraries are found to be providing access to e-resources in the form of CD-ROM collections, e-journals, e-books and databases online. Mainly access to e-content has been provided through the institutional website to publishers' web sites using ISPs. Through UGC -INFLIBNET and AICTE-INDEST consortia these libraries are able to provide access to scholarly e-content published in e-journals in different subjects of different publishers and vendors. When it comes to collaboration in case of print resources, all the colleges are availing the interlibrary loan services of DELNET, New Delhi. Through this facility, majority of engineering students and faculty are able to refer the expensive and standard books on subject of their interest from the library collections of premier institutions in India like IITs and IIMs. Majority of the libraries are facing the problems with inadequate and inconsistent yearly budget allocations. Separate allocation of budget for developing e-resources is not in practice in majority of the libraries. Collaboration in collection development is found to be successful only in the case of sharing e-journals. Due to the nature and size of budget allocations, lack of management support and non-compatibility in terms of available infrastructure facilities and resources developing print or e-book collections collaboratively among these libraries seems to be a challenging task. In view of the foregoing factors, the librarians should reengineer their strategies of Collection Development leading to greater user satisfaction

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