CHAPTER -II

LITERATURE REVIEW

2.1 Introduction

Review of literature is one of the most important steps of every research work, and research takes advantage of past accumulated knowledge gained as a result of constant human endeavor. Similarly, it is necessary to avoid repetition of research works. For these reasons a large number of literatures have been searched in different sources like KK Handique Library, NEHU Central Library, and Knowledge Centre of IIM Shillong. Moreover, full advantage of online resources like google scholar, N-LIST, and other open access e-resources has been taken to find out the relevant literatures for review. It is difficult to review all the published literatures due to wide variety of forms and formats. The literatures are searched covering various aspects of the study from different relevant sources such as journal articles, books, conference proceedings etc. both in electronic or printed publications on the study area “College Library Effectiveness Study with special reference to colleges of Tinsukia and Dibrugarh districts” to know the present status of ongoing activities. It is sincerely attempted to give an overview of the literature relating to the present study in the form of summary, annotation or description of the consulted works.

The entire literature review is subdivided into important themes, concepts or ideas to streamline the areas of discussion and arrangement of the consulted literatures are made in reverse chronological order. Finally, it will be worth mentioning that APA (American Psychological Association) style is followed for citations and referencing; i.e.

<http://owl.english.purdue.edu/owl/resource/560/2/>
<libraryguides.lanecc.edu/c.php?g=391383&p=2658142>

2.2 Role of libraries in college education

The institutions that serve as the vital agency for higher learning which supports education beyond higher secondary education and within the university education system represent the college education. In other words it is gateway or entrance to the higher learning and it is a communication channel of information where the learners get opportunity to build up their
individual mind, moral, and social values. Apart from the normal support and supplementation of classroom teaching libraries have many roles to play in imparting higher education. Therefore, it is found imperative to discuss the libraries role to play in academic pursuit in the colleges.

Dasgupta (2005) suggested that the actual functioning of library is not only based upon rich collection of resources and library facilities to satisfy the users need but setting up a valuable and modern information system is also necessary in the changing context of librarianship.

Mozenter, et. al. (2000) studied how liaising programme can strengthen the relationship between library and the teaching faculty to optimise the libraries role in academic pursuit. The role of college libraries in higher education has discussed about various services and desired functions to be performed to improve upon the present education system in the light of these literatures.

Loudon and Loudon (2000) had stated that, “higher education is all about the creation transformation and transmission of knowledge where the libraries are the reservoir of knowledge, organising and managing systematically is a need for its effective use.”

Amimini (1998) discussed not only the importance of libraries in education but stressed to make it well organised and maintained by skillful and trained staff who have up-to-date knowledge to provide effective and efficient services.

Reddy (1994) discussing on the National Education policy 1986 has expressed about the new orientation and role of libraries in higher education, high lighting the indispensable nature of libraries in Indian context where the people are least capable to procure their own books and journals. Libraries need to serve as nodal agency to facilitate the members of the present day knowledge society with all electronic gadgets and documents. Apart from the normal services, it has become indispensable to provide many related services like documentation service, reprography service, interlibrary loan referral service, internet browsing and many more. A modern library should act as the place for intellectual workshop and play a vibrant role for cross fertilisation of ideas and serve as an agency for perpetuation and extension of knowledge horizons.
Skeith (1966) emphasized that, apart from the fulfilling the objectives of a college library in order to support the academic curriculum, the librarians should also be active partner for the development of higher education.

Stueart (1981) stated that today education should be viewed as process of acquisition of knowledge skills, attitudes, and values by a learner based on the library information centers.

Shore (1973, p.464) made famous statement that “when a college is a library and a library is a college, it is a Library-College”; and he stress that classroom-centered teaching should be shifted to library-centered independent study.

Gelfand (1968) stated that in modern education system library has got a unique status. Hence, library is considered as the source of all published documents which are preserved to serve the need, interest of the academic community. So, in present day scenario libraries are termed as information centers or knowledge centers. It should support the parent institution as a creative learning center for all extension policies and programmes.

Indian Education Commission (1970) had suggested that, the college libraries should provide resources necessary for study and research to the teachers to keep abreast of the developments in their special field of interest; and should provide services and facilities for the success of all formal programmes of instructions leading to open a door to the wide World of books, to encourage self-reading for pleasure, self-discovery of personal growth and sharpening of intellectual curiosity.

Ellworth (1960) stated that existence of libraries in the colleges is for enrichment of higher learning and it is necessary to analyse extensively the tailored services to fit to the academic process and its effectiveness in fulfilling the role. It is felt that, classroom lectures are not enough in the context of complexity of present day educational needs. To bridge the gap library is the only way out.

Many contributors at National and International level reiterated the new challenges of academic librarianship and its role in education through their valued investigations. Some authors suggested that the introduction of current awareness services, building the curricular support, role of the library into an emerging strategy for the management of learning, creating
innovations, use of computers in acquisition, cataloguing, and circulation, etc., and inter-library loan, as a challenging phenomenon of this present age where the users needed a large quantum of knowledge and information.

During this period many related literature have been written on the pertinent role of libraries in the aspects of higher education as a teaching instrument of the institutions, and to draw the attention of the users to a well developed and well-balanced collection of reading materials, good infrastructural facilities with innovations, techniques and methods which will help to attract maximum number of users.

2.3 Library effectiveness

Since the concept of “library effectiveness” is derived from the concept of organisational effectiveness so there is no dearth of literatures relating to this topic in different areas. It is tried to review some of these which are found to be most relevant to the present piece of research.

Calvert (1994) had the opinion that there are four models of organizational effectiveness. Those are: Goal Attainment Model, External System Model, Internal Processes Model, and Multiple Constituencies Model. He concluded that first three models reflect traditional thinking about evaluation and the multiple constituencies’ model is one of the best ways of assessing library since some external groups involved in assessing the libraries performance.

Childers and Van House (1989) investigated where they observed some ambiguity in the definition of effectiveness whether it is a concept or a construct and because of intangible nature of services outputs, shifting nature of goals, indeterminate technology, multiple nature of population, even due to political vulnerability, measurement of effectiveness in libraries is a difficult task. The definition and the measurement of effectiveness are based upon the Standards and performance measurement or evaluation of library services. They compiled a list of indicators that are used to determine library effectiveness such as 1) Services access, 2) internal administrative process, 3) administrative resources, 4) Community relationship, 5) materials, 6) service out puts, 7) physical plant, 8) broad social impact, 9) service offerings, 10) Service Quality, 11) staff, 12) internal technical process and 13) user population.
Campbell (1977) in a major literature review had identified 30 different criteria of effectiveness study with imprecise definition and conceptual overlap among these. So, he had concluded that, different people adhere to different models, and there is no correct way to choose among them. Thus when a list is put together from different conceptual point of view, the composite list will almost inevitably look messy. Further he had argued that effectiveness is not a concept but a construct, so characteristics of which is neither directly observable nor measurable. However, to evaluate an organisation the investigator must consciously choose a precise set of criteria based upon which the assessment should be done.

2.4 **Effectiveness and Quality indicators**

Chandel and Thabah (2007) discussed various quality indicators for improvement of services at both input and output levels. They stated that, “the quality of output primarily based upon quality of input given by the library staff, therefore suggests that more weightage should be given to acquisition, content analysis, professional attitued, maintanance etc. rather than merely the levels of satisfaction (p.209)” . They have identified different quality indicators as depicted by different authors. They have discussed evaluation indicators, service quality assessment, quality of products, maitaining quality in acquisition policy, in technical services etc. and suggested outsourcing of technical staff improving stock maitanance, professional attituted, personalised service and a good public relation may improve the quality of services. Finally suggested to follow Deming approach to improve quality of library services.

Garvin (1984) discussed five approaches of quality:
(i) Transcendent-based quality- means the presumption of customers about the quality of a product, i.e. expensive products means high quality or high grade;
(ii) Product-based quality – It shows quality as a precise and measurable variable;
(iii) Manufacturing-based quality – here the focus is on the supply side and is concerned primarily with engineering and manufacturing facilities;
(iv) Value-based quality – It defines products in terms of cost and prices;
(v) User-based quality – Here the goods that best satisfy customer preferences are believed to be of high quality and quality equates with maximum satisfaction.
He further identified eight dimensions of quality that could serve as a useful framework to address quality issues in an organisation. These are performance, features, reliability, conformance, durability, serviceability, aesthetics and perceived quality.

Parasuraman, Zeithaml, and Berry (1985) had argued about the intangible nature of quality which is difficult to measure and even quality in service is remain undefined till then. They had reviewed the available studies and develop a model of service quality on the basis of the insight obtained from their exploratory investigation based upon four service businesses and opened a new dimension of research about service quality leading to the new protocol called SERVEQUAL.

Calvert and Hernon (1997) proposed four perspectives of service quality; these are excellence, value, conformance to specifications, and meeting and/or exceeding expectations.

The concept of quality in libraries is not a new phenomenon. Though it is not explicitly stated, Ranganathan’s five laws of library science, particularly the Fourth Law (save the time of reader) imply the importance of quality in library services. The law emphasizes that library services are to be simple and efficient to save user’s time. Knowledgeable staff provides seamless access to information regardless of format, or location of the user. Earlier approach of library evaluation was in terms of its collection i.e. size, number of titles and breadth of subject coverage, and various counts of its use, budget and manpower and services. In recent past, this concept has been changed towards the nature of service rendered by the library and not merely on the collection and size. However, in the context of to-days information environment, it is very much important to satisfy the user’s needs, and the traditional methods of performance assessment are not sufficient to judge the satisfaction of the customers. Today’s academic libraries face competition from alternative cost-effective information providers. In light of this reality, it is imperative for libraries to seek means to ensure that their services meet and preferably exceed user’s expectations.

There are many ways and means of library performance evaluation, determination of quality or effectiveness study of libraries. Here it will be discussed under the heads a) Evaluation of College Library, and b) College Library Standards.

2.5 Evaluation of College Library
The success and failure of the organisation is dependent up on the achievement of the set objectives within a time frame, economically, efficiently and effectively. Evaluation is such a process through which the success and failures of an organisation are tested. Many authors have contributed in this field some are as follows.

Philip (2008, p.2) stated that “Evaluation is the process of determining the worth of something such as a service or process by comparing what it is to what it ought to be.”

Bavakutty and Majeed (2005, p.101) stated that “evaluation is basically a judgement of worth, assessing the value of the organisation to the people for whom it is meant. It assesses the performance against users expectations, or it is the testing of an organisation or system for effectiveness and efficiency.”

Weiss (1998, p. 4) defines evaluation as "the systematic assessment of the operation and/or the outcomes of a program or policy, compared to a set of explicit or implicit standards, as a means of contributing to the improvement of the program or policy”. He further added that, library as the vital agency of teaching-learning programme in college education need to meet certain requirements for fulfilling the needs of the users.

The evaluation of college library is largely governed by the optimal provision of good resources, facilities and services, with a high spirit to support teaching-learning and extension activities of the concerned institution. From the above viewpoints, college library evaluation can be observed as a focus on the reactions of the whole system for the success of an organisation based on the objectives to meet the academic benefits of a college. The mission of the college libraries is to ensure maximum use of reading materials by the maximum number of users. Similarly, as a dynamic instrument of education, libraries need to respond meaningfully to its parent institutional goals and objectives. Hence, the evaluation of college libraries is critical to the success of higher education. Through the process of evaluation it is possible to assess the performance of the library how it is meeting the user’s needs.

2.5.1. Purpose of Evaluation

Always there is a purpose to do something. The evaluation of library and information services getting increasing importance all over the world for various reasons. So, evaluation of college
library effectiveness has also definite purpose. In sort, it is to measure the effectiveness or goodness or the quality of performance of a library.

Bavakutty and Majeed (2005, p.97) had stated that “Greater attention to evaluation and performance measurement in libraries and information centers is needed today mainly because of growing demand for greater accountability in libraries”. They have identified 6 different purposes which are all necessary to meet the growing demand for greater accountability in libraries. This are-

- To know about user perception individually, since every user may perceive differently from the same situation.
- To determine user needs, requirements and expectations.
- To minimize the gaps between users and the service provider (Library).
- To improve service quality and user satisfaction.
- To improve performance and to attract more user to the library
- To apply the process of continuous improvement to hold the users.

In nutshell, evaluation of libraries gives a close insight into the resources, user needs, services, and any other area which needs attention for future improvements.

Brooks-Cork library (2002) categorised the purpose of evaluation into four components, i.e. a) to assess current level of service; b) to monitor towards desired levels of performance; c) to identify particular problem areas or services that needs improvement; d) to justify allocation of resources.

Lancaster (1988) has given four purpose of evaluation i.e. i) to establish a “benchmark’ in order to know the performance level of service, ii) to compare the services of different libraries, iii) to justify its existence and iv) to identify the future prospects and possible causes of failure.

According to Lyle (1974) to make specific recommendations for the improvement of a library, it is necessary to analyse critically the programmes and operations, which is the basic purpose of evaluation.

2.5.2. Method of Evaluation

Evaluation is the process of ascertaining the effectiveness of library’s sources and services. To get better results in evaluation of a library, the method or technique employed is very much
important. While seeking better ways to libraries performance evaluation it is observed that there are some services or functions which do not have available techniques for evaluation.

Mikitish (2015) had identified five different models of evaluation which are reported in different literature reviews and meta-analysis. These are i) Gap Theory Model, ii) Outcome Based Model, iii) Return on Investment Model iv) Balance scorecard Model, and v) Total Quality Management Model. Moreover, he had explained four popular models i.e. i) System based model, ii) Outcome based Model, iii) Service Quality based Model and iv) Balance scorecard based Model.

Poll (2003) stated that measurement of inputs and outputs process is the traditional evaluating models. Further, she proposed an outcome based evaluation model considering variables like economic value, social impact, information literacy, information retrieval, and academic/professional success.

Saraf and Islam (2002) while reviewing the literature of library effectiveness observed that there are many methods and models to measure effectiveness and evaluate different types of libraries. They have identified eight different models or approaches used for library effectiveness study these are – i) Measuring goodness (Orr’s model), ii) Acquisition model, iii) Book availability approach, iv) User satisfaction approach, v) Library use and service approach, vi) Library staff performance appraisal approach, vii) System view approach, and, viii) Measuring effectiveness of library using SERVQUAL and LibQUAL+. They have concluded that “Library effectiveness cannot be evaluated on a single criteria and there is a need to assess multiple variables simultaneously to actually know whether the library is effective or not” (p.99). In their view, library effectiveness should be measured based on three basic criteria i.e. Library staff, library users and the library itself.

Alemna (1999) stated two main methods of library performance evaluation are subjective and objective methods. In subjective methods user’s opinions or attitudes are considered as the measure of effectiveness, so the users are taken as the unit of analysis and questionnaire or interviews are the basic instrument for collecting user opinion. Further she stated that in objective method the factors to be considered for evaluation are –1) Library inputs - like physical facilities, services, resources, finance and staff. Here effectiveness is considered directly
proportional to the resources and the services utilized, 2) Relationship between library goals and tasks of employees for optimum performance, 3) Library’s interaction with users where user studies may have crucial role on evaluation, and 4) Impact on total populations as outcome of the library services which will be reflected on the total library environment.

Katz (1997) stated that objective methods also called quantitative method typically used statistical data with known quantities. It is measured how far the library objectives are met through the physical facilities, collections, information resources, and the services designed and offered to the users.

Lancaster (1992, p.1) had the opinion about evaluation of libraries is that ‘‘A good way to focus on the evaluation of library service is through a generalized representation of operations of a library as seen through the eyes of an evaluator’’. He further suggested that effectiveness; cost effectiveness and cost benefit should be the measure of evaluation which is directly related to input, output, and outcomes of a library. Evaluation is a conceptual analysis, based on the measure of input, output, and outcomes library quality can be improved and make it an invaluable centre of information.

Parasuraman, et.al. (1988) described the development of 22-item survey instrument namely SERVQUAL for assessing customer perceptions of service quality in service sector. It described two main objectives are the development a multiple-item scale and its properties for potential application. The paper described the domain of service-quality construct, the generation of scale items, data collection and scale purification, evaluation of scales reliability and factor structure, assessment of its validity and discussed the potential application of the scale. It has recognises 5 service quality dimensions and 5 service quality gaps. Service Quality dimensions are-

Tangibility- the physical facilities and personal appearance.
Reliabilities- offering promised services dependably and accurately.
Responsiveness- willing to help and provide prompt service.
Assurance- the knowledge, courtesy and confidence of employees.
Empathy- caring and individualized attention to the users.

While rendering and perceiving services always creates some gapes and they identified 5 of them as follows-
Gap 1- there is a difference between expectations of user/customers and perception of management about the customer’s expectation.

Gap 2- difference between management perception of user’s expectations and service quality specifications.

Gap 3- difference between service quality specifications and the delivered service quality.

Gap 4- difference between delivered service and promised services to users.

Gap 5- difference between customer’s expectations and perceptions of service.

Finally, they have expressed these differences with the formula below

\[ Q = P - E; \]

where

- **Q** = quality,
- **P** = Customers perception about service
- **E** = Expectations of customers about service

Goodall (1988) brought out historical review of library performance measurement from 1960s to 1980s on the basis of the review articles, and noticed that although there is a huge literature on the topic there is lack of progress in the work. He had assessed some fundamental difficulties of performance measurement of libraries and suggested a model for evaluation based up on output measures.

Pack and Pack (1988) had developed ‘Systems Model’ for college library management which is based on the variables like- a) Input-environment (economic, political and technological), Resources (human, capital, material information technology and communication technology and learning resources etc.); Information (accounting, financial, statistical etc.); b) Process- design, planning, decision making, innovation and evaluation; c) Output – operations (individual and group behavior etc.) and performance (resource strength, service quality, financial operations etc.)

Brophy (1986) stated that to assess the performance of a library, it is necessary to measure the system both in terms of its inputs and outputs and analyze the resulting data.

Malley (1984) emphasised that all aspect of evaluation programme mostly is to enunciate success or failure within the programme to amend and improve wherever necessary.
D'Elia & Walsh (1983) in a literature review had reported that there are many confusions and ambiguity in the literatures of user satisfaction studies mainly differences of definitions, the measures used, reasons for using construct, contradictory terminology etc. They had identified the subjective and objective approaches of user studies. In subjective method the user and their opinion is the unit of analysis where users evaluation is considered as the valid indicator of library performance. In objective method, it is assumed that the experience of satisfaction of users as per their demand and equal to the level of library performance, so the proportion of items supplied on demand is the unit of measurement of satisfaction.

Lancaster (1977) gives more emphasis on effectiveness of services in terms of how well the services of the library are able to meet the demands of its users.

Orr (1973) developed a model which generated a lot of interest among the professionals and many empirical studies were conducted based upon this model. Some workers have also worked on criterion to be taken into account while conducting evaluative studies based on his model.

Evans, Borko, and Ferguson (1972) stated that there are so many evaluation methods but no one can critically judge the library performance to make a valid evaluation on the basis a literature survey on measures of library effectiveness. They have formulated the six criterion concept which is based on accessibility, cost, user satisfaction, response time, cost benefit ratio, and use.

Hamburg, Ramist, and Bommer (1972) gave more emphasis to evaluate usability of resources. Major impact of evaluation is to discover areas where changes are needed to bring through alternatives to the present operating procedures. They discussed use of different types of forms of user exposure to documents and discussed to develop a measure for public libraries. They suggested that the accrual accounting method be used to compare measure with costs.

Salverson (1969) reviewed several methods of evaluation including application of statistics. He also worked out a formula to determined efficiency of library operations.

ACRL (1968) prepared a 'Guide to Method of Library Evaluation' in which evaluation process has been divided into three components arranged according to their importance. These are: Prime Evidence - books, reading space, professional staff; Secondary Evidence - budget, planning documents; and Special Activities Suggesting Excellence - a student book club and publications.
Most popular method of service quality assessment is gap analysis based on disconfirmation theory to judge the users satisfaction. In this method the difference between the users’ expectations and perceptions are measured to evaluate service quality. Presently SERVQUAL and LIBQUAL+ are two most popular methods of evaluation for organisational effectiveness where LIBQUAL+ is used for libraries.

2.5.3. LibQUAL+® Method

SERVQUAL was tested for the evaluation of quality dimensions in Libraries by Colleen Cook and Fred Heath in 1995, 1997, and 1999 in Texas A & M University (TAMU) Library (Thompson, 2007). But, it was felt that, some of the items were found irrelevant and some most important items were left out in the protocol by the library users. In approach of Colleen Cook, Bruce Thompson and his team of TAMU had developed an alternative protocol called LIBQUAL+® for non-profit use in improving libraries and handed over to ARL. The LibQUAL+® protocol was developed in the year 2000 and tested at TAMU Library with 12 other institutions. Initially there were 55 core items and in later stages it was reduced to 25 and finally to 22 core items. But, it is not just an instrument of 22 items, have provision for more items with an open ended comment box. The LIBQUAL+® has been extensively used since its inception around the world and has been continuously revised to improve its performance. It includes quantitative data yielded from 22 core items and keeps provision for quantitative data to be provided by the users in the form of open ended comments. This is the first web-based survey instrument made web-able by Russell Trey Thompson and Jonathon Sousa for the users. Now “LibQUAL+® is a suite of services that libraries use to solicit, track, understand, and act upon users' opinions of service quality” offered by the Association of Research Libraries (ARL) to Library community in a web-based survey bundle. ARL provide training for assessment and improvement of libraries by changing the organisational culture for marketing of the information and library services. It is observed that LibQUAL+® is highly useful for the purpose of research within libraries to compare and evaluate library services for benchmarking and identification of best practices purposes (Thompson, Cook, & Kyrillidou, 2005).

The basic aims of LibQUAL+® are- 1) To nurture a culture of excellence in providing library service; 2) To help the libraries in understanding perceptions of users about library service
quality; 3) To help in collecting and interpreting library users systematic feedback over time. 4) To help in getting comparable assessment information from peer institutions; 5) To identify best practices in library service; and 6) To help in enhancing analytical skills of library staff in interpreting data.

Since LibQUAL+® is based on the SERVQUAL model of assessing service quality in marketing research; it used 22 items of SERVQUAL instrument with five-factor quality dimensions. But, while it was found that it would not yield the expected five-factor structure in the library setting, 13 more items were added to the instrument after consulting with 13 participating institutions and finally it had become 41 item instrument for the pilot study. With the reliability item analysis and factor analysis of the collected data from the pilot study the items were reduced to 34 items relating with four quality dimensions i.e. Affect of service (11 items), Library as a place (9 items), Access to Collection (7 items), and Reliability (7 items). (Bavakuty, 2005). In later stages the items were reduced to 25 items renamed with 4 dimensional quality factors, i.e. Access to information (5 items), Affect of service (9 items), Library as place (5 Items), and Personal control (5 items); and used a 9 point Likert scale to mark user responses. LibQUAL+® provides not only 22 standardized items, but offers libraries to choose to select five optional local items on service quality. At present, there are three basic dimensions of quality factors with 22 items and an additional dimension of 5 local items are in practice of LibQUAL+® instruments.

Evaluation of libraries or the measurement of library effectiveness is a complex matter to judge, since there are no universally accepted unit of measurement, the measures, and the methods. It is necessary to find out the measurable things, process and phenomenon as the valid indicator of effectiveness and benefits. Since many operations and services of the library are difficult to measure and evaluate, so selection of methodologies to conduct such studies is critical which needs authentic methodology for better result.

2.6 Library standards

Standard is defined as “a level of quality, achievement, etc. that is considered acceptable or desirable” or “something very good and that is used to make judgments about the quality of other things” (merriam-webster.com)
According to Senkus (2003) standard is a uniform measurable of an item or process that is written, published and distributed by a national or an international agency.

Library standard as defined by South African Library Association (1968, p.11) is “the pattern of idea, a model procedure, a measure for appraisal as a stimulus for future development and improvement and as an instrument to assist decision and action not only by librarians themselves but also by laymen concerned directly or indirectly with the institution, planning and administration of library services.”

2.6.1. **American scenario**

Standard is not a static measure, it changes with change of time, technology and the environment of the entity concerned. So is the case for college library standards. The American Library Association (ALA) in collaboration with Association of College and Research Library (ACRL) is pioneer to brought out the standards for college libraries in 1959 (ACRL, 1959). It is considered as a comprehensive guide for evaluation of college libraries and one of the recognised international standards. It is revised several times to suit the standards with the changing needs. Of course, in earlier standards, only quantitative measures were considered for evaluation not the qualitative measures, since service quality is difficult to measure. But, in later revisions both the quantitative and qualitative factors are taken into account to measure the effectiveness and functioning of the college libraries. Earlier editions were concentrated mostly on the library input like money, space, materials, and staff activity; but in later additions standards are set not only on inputs but also on outputs and outcomes and given special emphasis on outcome assessment. The latest edition of ALA-ACRL standards is released during October 2011, titled “Standards for Libraries in Higher Education”. The basic aim of “The Standards of Libraries in Higher education” is to guide the academic libraries in achieving and sustaining the role of libraries as partner in educating students, in achieving institutional mission and putting the libraries as a leader in academic assessment and for continuous improvement of the campuses. Library must always be ready to adapt them accepting the changes in higher education and document their valued contributions towards institutional effectiveness. The basic differences of these standards with earlier versions are that it enunciates expectations for contribution of libraries towards institutional effectiveness and gives a comprehensive framework using an outcome based approach (ALA-ACRL, 2011).
Structurally standards have two parts, the principles and the performance indicators. There are 9 principles and each principle has its own performance indicators. ACRL provides two models in assessing the libraries, i.e. outcomes assessment based model and evidence based model. The standard documents provide example of outcomes and metrics as suggestions in appendix 1 and 2 respectively for convenience of use.

The principles of these standards are given below.

1. **Institutional effectiveness:** - Library should take such measures which can contribute for the institutional effectiveness through continuous improvement of services based on its outcomes. There are 7 performance indicators towards this principle.

2. **Professional Value:**- In advancing the professional values libraries should take care of the value of intellectual freedom, IPR values, user privacy and confidentiality, collaboration and user centered service. There are 6 principles for these performance indicators.

3. **Educational Role:**- Library should partner the institution for success of it educational mission by supporting information literate learners in effective use of information for their academic success, research and lifelong learning. 6 performance indicators are suggested from this principle.

4. **Discovery:**- Library should organise and manage all information resources in such a way that user can discover it easily with the help of technological innovations. Suggested 6 performance indicators.

5. **Collections:**- To support the teaching and research mission of the institution library should develop such a collection which is rich in quality, quantity, diversity, in different formats and current. For this principle also there are 6 performance indicators.

6. **Space:**- Users interact with the ideas in the physical and virtual environment of the library in expanding and facilitating their knowledge horizons for creation of new knowledge. Here 8 performance indicators are suggested.

7. **Management/Administration:**- Resource management and allocation, planning for future are the common management practice for the success of the libraries mission effectively. Suggested 9 performance indicators for this principle.

8. **Personal:**- Excellence of library services is dependent on the supply of efficient and qualified library staff in sufficient numbers in a continuously changing environment. For this principle 6 performance indicators are suggested.
9. External Relation: In order to promote the value of the library it is necessary to use multiple strategy engaging the people from the institution itself or from outside to advocate and educate the users. There are only 3 performance indicators. Performance indicators are internationally recognised as library centric, but outcomes are user centric, enunciates what users have achieved as outcome of the performance indicators.

2.6.2. Indian scenario

In India it was the Dr. S. R Ranganathan who had prepared first the library standards.

But, these are never up-dated for which these standards fail to meet to-days library requirements in many cases, even many things are remain un-defined, and unstructured.

Lakshmi (2013) stated that “Several attempts have been made in India to develop standards for college libraries. However, Ranganathan’s standards are the only authentic ones even in this day and age. The paper concludes that there are no authentic standards revised and approved by a body like the UGC to evaluate college libraries in India and suggests a model set of standards for college libraries in India, keeping in view the technology-based information environment.” She has proposed a set of standards for college libraries.

The very basic practice of UGC about library standards is the suggestion and recommendation of different commissions and committees including the seminar and workshop recommendations, where every commission and committee had recognised the role and importance of libraries in Higher Education institutes. Radhakrishnan Commission (1948-1949) was the first to recommend on budget allocation followed by Kothari Commission.

The UGC Library Committee (1957) headed by Dr. S. R. Ranganathan had recommended standards for budget allocation @Rs. 15/ and Rs.200/ be spent for per student and per teacher respectively and form the total library budget 50% on staff and 50% on books, periodicals and maintenance of the library. Regarding library staff this committee has given a formula which is known as “Ranganathan’s staff formula” and published by UGC in 1965. The staff structure for College libraries with an enrolment of 500 students and 10,000 volume of collection is as follows. Moreover, this committee has suggested that library should keep open for 40 hours in a week.
According to the AIU report on “National Policy for University Libraries (1986)” it was recommended that 10% of the total budget of university and college should be spent for libraries (Raj, 1988).

Ranganathan’s staff formula

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Staff category</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Librarian</td>
<td>01</td>
</tr>
<tr>
<td>2.</td>
<td>Professional assistant</td>
<td>01</td>
</tr>
<tr>
<td>3.</td>
<td>Semiprofessional Assistant</td>
<td>02</td>
</tr>
<tr>
<td>4.</td>
<td>Library Attendant (Sr.)</td>
<td>01</td>
</tr>
<tr>
<td>5.</td>
<td>Library Attendant (Jr.)</td>
<td>02</td>
</tr>
<tr>
<td>6.</td>
<td>Library cleaner</td>
<td>01</td>
</tr>
<tr>
<td>7.</td>
<td>Total staff</td>
<td>08</td>
</tr>
</tbody>
</table>

Table 2.1: Ranganathan’s Staff formula as published by UGC in 1965.

i. Standards recommended at UGC workshop 1979

Further UGC had organised a workshop for formulating standards for college libraries in 1979 at Khandala which was later approved by the UGC Library Committee. The recommendations are basically on –
1. Service to user,
2. Finance,
3. Organisational Set up/Governance,
4. Technical Processing,
5. Physical facilities and

1. Service to user:- All the teaching, non-teaching and students of a college are recognised as the primary users and library should ensure services to this primary users. It is necessary to maintain a well-equipped library with facilities like reading cum text book section, circulation section, reference and bibliographic services. Further it was recommended that library should ensure to promote inter-library loan, documentation and reprographic services as well.
2. Finance:- Finance is a most important aspect for a college library. The recommendations for financing are the allocation of fund with sufficient capital budget provision. The expenditure for staff salary, furniture and fittings, stationary etc. should be included in the college budget not in the library budget. From the allocated amount 20% should be spent on periodicals and 80% on other reading materials, for maintenance and binding of books and journals.

3. Governance:- Committee recommended that, librarian is the chief administrative officer of the library and responsible to the principal. The status and the qualification of a librarian should be at par with the faculty members. However, there should be a library advisory committee to advice the librarian for smooth functioning of the library taking principal as the chairperson, librarian as the member secretary, four faculty members be appointed as member by the principal on recommendation of the librarian including a student member selected on merit basis. The major functions of the committee are to act as an advisory body to the librarian, to perform as a link between the library and the other faculty member as well as students. This committee will assist the librarian in formulating general library polices and development plans, and in taking decision on weeding out of unwanted materials. It is suggested to meet the committee at least quarterly.

4. Technical Processing:- Technical processing in the library includes classification and cataloging in priority basis followed by, stock verification and identification of missing books, weeding out of unwanted materials etc.

5. Physical facilities:- It is necessary to provide a well-equipped modern functional building to every college. The specification for different section are as follows-
   a. Reading room:- 25 sq. ft. per student for 15-20% of total student
   b. Reading room:- 40 sq.ft. per teacher for 15-20% of total teacher
   c. Stack area :- 7 book per sq. ft. e.g. 300 sq. ft. for 20,000 books
   d. Circulation section:- 300-500 sq. ft.
   e. Librarian’s office: - 150 sq. ft.
   f. Processing section:- 250 sq. ft.
   g. Reference section:- 300 sq. ft.
   h. For non-book material:- 100 sq. ft.
Moreover, building should be designed in such a modular way that, it can accommodate every function in the library smoothly and have provision for future extension.

6. Library staffing:– Staff is the most vital ingredient which give life to the library without which things are useless. UGC has given a basic staff pattern based on 500 student strength and 5000 volumes of collections as follows-

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Designation</th>
<th>Basis</th>
<th>Needed staff as per UGC workshop 1979</th>
<th>Need of Additional staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Librarian</td>
<td>500 Students &amp; 5000 documents</td>
<td>01</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Assistant Librarian</td>
<td>01</td>
<td>01</td>
<td>01</td>
</tr>
<tr>
<td>3.</td>
<td>Library Assistant</td>
<td>02</td>
<td>01</td>
<td>01</td>
</tr>
<tr>
<td>4.</td>
<td>Library clerk</td>
<td>01</td>
<td>0</td>
<td>01</td>
</tr>
<tr>
<td>5.</td>
<td>Library attendant</td>
<td>03</td>
<td>02</td>
<td>02</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>08</td>
<td>+03</td>
<td>+03</td>
</tr>
</tbody>
</table>

Table 2.2:– Library Staff Structure as recommended by UGC library Committee 1979.

While the number of students increases by another 500, 1 Library Assistant and 2 Library Attendant should be added and at the same time for every addition of 2500 volume documents up to 80,000 volumes of books 1 more Library Assistant and 2 more Library Attendant should be appointed. But, while student strength exceeds 2000, 1 more Assistant Librarian and 1 Library Clerk should be appointed.

Qualification of library staff specifications are: - Librarian with MLISc degree, Assistant Librarian with BLISc degree, Library Assistant with BLISc or certificate in Library Science. For Library Clerk and Library Attendant qualification should be at least HSLC or HSSLC passed.

ii. Standards recommended by UGC standing committee, 1980

The standing committee of the University and Colleges of UGC, had recommended another standard in the year 1980 which was almost similar to that of the recommendations of the UGC Workshop 1979 under the following heads-
Some important points of this standard are – these standards are basically service oriented where more stress is given to effective and efficient use of library resources, instructions for use of library, longer working hours, easy access to resources, inter-library loan, documentation, reprographic services as far as possible.

Apart from the normal reading resources stress is given for the reading materials for collateral reading and up-to-date collections.

Regarding library budget it is suggested to sanction on the basis of the quality of services provided but, recurring budget should be minimum 4% and out of which 25% should be spent on journals if the college offers post graduate courses.

Library staff requirement should be based on 500 student enrolment and 10,000 volumes of collections for a set of library staff containing 1 librarian, 1 Assistant Librarian, 1 Library Assistant and 3 Attendants.

Librarian is the head of the library and responsible to the principal for the functioning of the library. To take care of the library affaires a Library Advisory Committee be formed and look after the administration and management of the library.

Regarding technical processing standard cataloguing rule and classification be adopted even right from the beginning of the library. For physical facilities or library infrastructure ISI standards are recommended which were earlier developed by Dr. S.R. Ranganathan.

iii. Standards of “Bureau of Indian Standards (BIS)”

However, on the basis of Ranganathan’s recommendations Bureau of Indian Standards (BIS) had produced standards for different aspects of the libraries; of course these are not that much
structured as per the need of the college libraries. BIS have set standards for Public Libraries, Academic Libraries, Institutional Library, Dormitory library etc. under which we have to view our evaluation work. The standards are reproduced here for convenience:

- Code of Practice for Library lighting
  - IS 2672 : 1966
- Specifications for Library furniture and Fittings: part 1: Timber (1st. Revision)
  - IS 1829 (Part 1) :1978
- Specifications for Library furniture and Fittings: part 1: Timber, Steel
  - IS 1829 (Part 2) : 1977
- Library Furniture and Fitting Part 2 Steel ( First Revision)
  - IS 1829 (Part 2) : 1993
- Recommendations for modular coordination of Dimensions in the building industry (1st Revision)
  - IS 1233 : 1969
- Code of basic requirement for water supply, Drainage, and Sanitation (2nd Revision)
  - IS 1172 : 1971
- Metal shelving Racks ( Adjustable type)(2nd Revision)
  - IS  1883 : 1975
- Design of Library Building – Recommendations relating to its Primary elements(2nd Revision)
  - IS 1553 : 1989

These are the most important and primary elements that have been selected by BIS for standardisation.

**iv. NAAC and Library standards**

NAAC as an assessment and accrediting agency for higher education institutions of India could have produced some standards for the college libraries of the country but, it has published some guidelines of quality indicators for library and information services covering 4 broad areas for evaluation instead of producing standards. These 4 areas are – i) Management of library and information services, ii) Collections and services provided to users, iii) The extent of the use of services and iv) The best practices (NAAC,2015).
So, in nutshell we can say there is no up-to date College Library Standards in India with which we can compare our college libraries for evaluation. But, we can consider the recommendations of UGC workshop 1979 or UGC standing committee 1980 and ISI/BIS standards for this present study as per our convenience.

###