CHAPTER – 6

HRD in Libraries of Institutions of Higher Education with reference to Library automation

6.1 HRD in the context of automation of libraries of HEI:

A brief discussion on the HRD of an organization in Chapter 5, makes it amply clear that an organization has to recognize the importance of human resource development (HRD) as the basis on which the entire edifice of the organizational development stands, and each employee must be taken proper care of, by the organization, right from the first day to the last day of the service in the library. If the organization is able to show due concern for an employee, it is but natural that the employees would reciprocate the same adequately.

The problem of alienation of an employee if any is the consequence of the lack of concern for the personnel on the part of an organization which has so far only used the employee for furtherance of its own objectives without caring much for their individual sentiments, emotions and problem. As against this, the HRD advocates that an organization can prosper not at the cost of its employees, but only along with their prosperity. It has accordingly suggested adequate measures through which employees of an organization can be taken proper care of at each stage of their career.

The relationship between an organization and its employees has so far been accepted only to be contractual wherein in consideration of the settled amount of salary and perks; the employees are required to perform the assigned duties at the various stages of their career. However, this contractual relationship is only static and too out and dry and cannot, therefore, be considered to take adequate care of the dynamic association an employee has with his organization. It is therefore essential as per HRD that this relationship be redefined in a wider context and in such a manner that the organization is called upon not only to take care of the basic physiological needs, but also the needs for affiliation, status, self-esteem, and even self-actualization.

The overall purpose of HRD is thus, intended to create better rapport between an organization and its employees so that one works not against, but in cooperation,
coordination and participation with the other, ensuring a better sense of mutual belongingness.

In fact, the libraries which are non-profit organizations have a lot of similarity with the physiological organization called human body. A close look at both of them gives out that as human body is the sum total of various organs, each of which is properly placed for performing the specific functions, so also the libraries are the sum total of the various persons working therein, each of whom is entrusted with the specific duties to be performed. In a human body, if eyes are not able to have visual – perceptions or ears are not able to have audio – perception. Their very existence in the human body is useless. Likewise, in a library if an employee is not able to efficiently discharge the assigned duties, his stay in the organization itself is meaningless. However, in the normal situation, the ears and eyes should be able to give proper audio – visual perceptions, and any absence thereof must be attributed to certain defects which need to be removed through proper medical care. Likewise, the mutual distrust, erosion of authority and indiscipline contributing together towards inefficiency in library services, must be attributed to certain defects, for which HRD advocates proper diagnosis and the remedial measures so that the people inside the organization are brought back to the normal work culture for maintenance of proper functional relationship.

6.2 Present challenges before the library personnel in HEI:

The current rapid developments in the field of information and communication technology (ICT) have changed significantly the nature of work in libraries of HEI and other types of libraries as well. These rapid changes have brought about new types of library systems and services. New concepts such as the hybrid library and the digital library have emerged. The changes in library work have occurred all over the world, and the developing countries like India are no exception to this. Nevertheless HEI libraries in India have been lagging behind the fast changes brought about by advances in ICT. There are a number of reasons for this situation. Lack of qualified library and information professionals and lack of appropriate in-service training and continuous educational programmes for library staff in HEI libraries may be cited as major reason for this.

In the context of automation, the challenges before the library personnel today are many and each of these needs to be properly diagnosed and suitably addressed. The broad prescriptions given by the five – fold purpose of HRD each of which can be further bifurcated in to specific prescriptions to counter act the various maladies. The malady of job deficiency, for example, giving rise to lack of adequate initiative on the part of an employee can be remedied by proper, and adequate reinforcement through training. Likewise, any deficiency on the part senior managers to get the work done by his juniors can be removed by giving adequate inputs of behavioural science.

The vision and mission of HEI libraries are changing in India. These HEI libraries now take on the key role of providing the competitive advantage to
various universities, research and development organizations which play a pivotal role in the process of nation building. HEI libraries are positioning themselves to be the torchbearers and path makers of educational advancement by way of integrating knowledge systems and resources. These HEI libraries are required to do serious introspection on their roles, responsibilities and contributions. Comments and observations are noted very frequently on their strengths and limitations in various national and international forums. The literatures discussed in Chapter 2 on HEI libraries aptly reveal the changing roles and responsibilities of information professionals in the modern society. The HEI libraries are also called upon to exploit all forms of digital and telecommunication technologies and explore new avenues and possibilities for the enhancement of knowledge resources which are available in different forms and places. The builders and managers of HEI libraries are also required to enrich computer security and authentication techniques which promote information diffusion. The information personnel are also required to enrich their professional competence and leadership qualities which would facilitate meaningful identification, location and evaluation of information resources in order to promote professional excellence among the user community. The “user-centred” paradigm has been adopted in the developed countries to create customizable interfaces and enrich the process of collection development in the HEI libraries. The HEI libraries really demand a well-conceived, designed and maintained systems, practices and operations which would effectively meet the needs of different constituent groups and individual users. The administrators are mainly responsible for creating and sustaining software, hardware, human resources and data bases which would go a long way in promoting research and development in India.

6.3 Changing role of the librarian in HEI:

Library and information professional’s role in the higher education setup has been constantly changing over time. Rice-Lively and Racine (1997) has aptly summarised these changes in their essay “The role of academic librarians in the era of information technology” where they writes “Originally, the purview of HEI librarianship primarily focused on the book, later broadening to encompass the facility housing the books and access to these resources for library users. One of the earliest references to the role of the American HEI librarian is, in 1707, when the Harvard Corporation voted that the library-keeper’s primary function was to protect the books and exercise control over their use. At that time college budgets were small, and books were rare and precious treasures entrusted to the care of scholarly, respected men. The librarian was expected to be a lover of books, a gentleman, and a scholar. By the 19th century, HEI librarians recognized the need for special library services for undergraduate students. In 1815, Harvard College accepted a recommendation for a separate undergraduate college. The development and maintenance of separate collections and services customized to meet the educational needs of undergraduates extended the role of some HEI librarians.

The role of librarians in the HEI setting became more specialized from the 1950s to 1960s, following, no doubt, the increasing complexity and
specialization of knowledge itself. In some cases, the responsibility for selecting materials shifted from the faculty to librarians. Librarians filtered the flow of new publications, because too much was being published for faculty to be able or willing to continue selecting material for library collections without assistance. The role of HEI librarians shifted from advisers or helpers to shapers of the contents and services of the library. By the mid-1960s, advances in computers and networked technologies influenced HEI library routines and services, and eventually, the role of librarians.

During the 1960s, advances in telecommunications technology that permitted computers to connect users with data at remote sites contributed to fundamental changes in the way HEI librarians served their users. Library users could now be connected with information outside the local library building and beyond its locally-held resources. The availability of enhanced access to a much broader spectrum of information resources placed increased emphasis on librarians' skills as subject specialists, as teachers, and as interpreters of the information needs of their library clientele.

By the 1980s, library literature signalled dramatic changes in the role of the HEI librarian, with some of these changes due, in part, to the increased availability of and improved access to computing and information technology. The adequacy of the title “librarian” to describe this position was questioned. Alternative professional titles were suggested to reflect more accurately the new functions required of the librarian. Such titles as “intermediary” or “information manager” were suggested for this professional who now travelled back and forth bridging electronic information and the client.

There was mounting evidence that the librarian was moving from the more traditional duties (collection maintenance and custodial tasks) to newer functions of translating, accessing, and marketing resources beyond the walls of the institutional library. The function of the librarian seemed to be evolving from the keeper of the books to that of network navigator.

Additionally, the information professional now interacts with an information environment particularly that represented through the Internet which is complex, multidimensional, and dynamic. This environment offers the potential, on one hand, for new options for storage and retrieval of information, and, on the other hand, for changes in the very nature of the scholarly information process. The introduction of World Wide Web (WWW) browser software, such as Mosaic in early 1993, soon followed by the Netscape NavigatorTM, has further transformed publishing and information access and organization, and has influenced the role of the information professional.

Librarians have been spurred by technological developments to become more efficient organizers, indexers, abstractors, archivers, in addition to assuming new roles such as, intermediary, facilitator, end-user trainer/educator, web organizer & designer, researcher, interface designer, knowledge manager/professional and sifter of information resources.
6.4 Qualities Required for HEI library Professionals:

The foregoing discussions have led us to conclude that information professionals today should possess a number of specific human relations skills. They must: Be good communicators-interpreters and listeners-who are intuitive and sensitive enough to understand queries from clients in order to ascertain specific information needs; Use good judgment to determine what kind of information and how much information each client needs. They should serve as or construct a “bridge” linking the information and the user. The primary importance of the human interaction between the user and information thus becomes apparent. Further, the networked information environment requires new skills of the information professional. These skills are technical, cognitive, and behavioural. The changing nature of the environment demands a commitment to life-long learning with HEI librarians being more self-directed and self-motivated to develop new skills that will enable the fullest use of new technology and resources. Information professionals would do well to become more than responsive technicians cultivating a level of comfort with ambiguity and change, and becoming more flexible and creative in their information-seeking habits. The role of the HEI librarian requires extreme multi-tasking. He should be a jack of all trades, a preservationist, a buyer, a reference librarian, use monitor, mediator, supervisor, planner, budgeter, computer repairman, technology assessor, etc. all at the same time. Effective information professionals need to evaluate and interpret critically the information resources they access. In sum, information professionals will be more successful working smarter, thinking creatively, critically, innovatively, and analytically as they seek to mine appropriate and useful information for the user. Their performance should be less rote and more cognitive, intuitive, and innovative in their use of all resources at their command. With the above skills in hand, information professionals of HEI libraries would be able to cope with present environment.

6.5 The Functions of Library Information Professionals in HEI libraries redefined in context of automation:

The role of the library information professional in any libraries of higher educational institutions includes a chain of functions: preserving material; acquiring, transforming, and repackaging information; producing secondary information; teaching and coaching; and several others.

Information professionals continue to do the same fundamental things: determining information needs of users and linking the users with resources that will meet those needs. Both information professionals and users, however, use different tools and different techniques to access information. The introduction of new information technology (IT) had actually energized and revitalized stagnating careers of information professionals, providing motivation to learn and practice new skills.

Many positions in the library today exist due to new technologies. These information professionals have titles such as “electronic services librarian” and perform tasks such as creating WWW pages for the library and for professors.
and classes, building and maintaining CD-ROM networks, providing instruction in using the Internet and software tools to mine information, and searching the WWW for information sites of value to users.

Again in an automated environment, information professionals are spending more time training their users and marketing new services and electronic resources through, for example, the development of special printed or electronic guides.

In the electronic information environment assisting users is a collaborative endeavour. The actor and the interactor both contribute to the search; each person offers his or her particular expertise.

The globalization of information means that access to information is no longer limited by what is available in the local collection. The librarian is no longer the primary "gatekeeper" or guide to information. Greater challenges in evaluating content face the librarian.

Technology provides challenges to access. In the networked environment Librarians make ethical decisions about what to access and what not to. Limiting access to particular levels of employees by requiring a username and password; others may institute behind-the-scenes filtering software or restrictive policies for providing access to the entire Internet. Establishing well defined access policies will help to clarify who has access to the Internet, under what conditions, for what purposes, and with what restrictions.

According to Mary Ellen Bates as quoted by Kalamamal and Selvi (2004) another role change technology brings is that the "library and information center managers are often asked to negotiate these electronic subscriptions. This requires a new set of skills and even an entirely new relationship with publishers".

With the increase in electronic resources, librarians and libraries are no longer just collecting and caring for print materials. The long-term consequences of failing to store and preserve information are that resources are not archived and protected for future researchers.

As more and more end-users acquire desktop access to information in an intuitive, seamless search environment, the word 'librarian' itself will become a misnomer. Rather, this changing role implies a different skill set. The emphasis will shift from technical skills in the library to communication, facilitation, training and management skills (e.g. strategic and marketing management). To interact with IT staff and managers (e.g. in managing the Intranet), information professionals will also require a basic understanding of computing and network architectures.

Because librarians are trained to perform searches electronically and to select appropriate resources, they know that the information the average patron retrieves is often of poor quality and that important resources can be missed.
Most librarians believe that their role as gatekeeper or guide has not changed even if the format of the information has changed. The trend is for the role of the librarian to move from that of a passive intermediary responsible for guiding patrons to appropriate information resources toward that of a much more proactive professional whose role includes analysing and repackaging information. Librarians have faced this challenge head on by becoming masters of the Web. Librarians create powerful Web sites such as the National Library of Medicine's PubMed database. Librarians see the Web as an easier way to share what they know with others. They gather electronic information and create electronic pathfinders and front-end search tools to help users. Librarians create online tutorials and instructional Web pages to help patrons perform the best searches. They gather links to websites on specific topics and lead patrons to these evaluated sites as a starting point.

The digital library requires the librarian not only to collect, organize, and teach patrons about those resources in the local collection, but also to acquire access to the vast amount of aggregated information housed on computers throughout the world and to guide users to this information.

The nature of the reference service that librarians provide is also changing. The reference desk no longer has to be a physical desk. E-mail can be sent and answered without any physical interaction between the patron and the librarian. "Ask-a-librarian" sites appear on many library homepages.

The Internet has forced librarians to take on the role of arbitrary gatekeeper. Applying filters and abiding by policies may conflict with our duty to provide equal access to all of our users. Librarians are often forced into the unpleasant role of the "Internet police" for the organization.

Although technology presents the librarian with ethical challenges, the librarian is ready for the role of information professional in the connected world. Information professionals have, out of necessity, acquired skills that can contribute to success in their new roles. According to Duberman quoted by Kaliammal and Selvi (2004) there are four skills that information professionals already possess:

- they "know about changes, the problems, and the opportunities the new technologies and new content can provide;
- [they are] used to learning new things;
- [they have] negotiation skills; and
- [they possess a] deep knowledge of information systems and databases [that] really enables them to turn questions inside out and look beyond the obvious".

Libraries have frequently been early adopters of new technology, and librarians continue to be at the forefront in learning and teaching new technologies. Librarians see the Internet and electronic information as tools that are used to provide information. According to Crawford as quoted by Kaliammal and Selvi
(2004) librarian must “recognize that technology offers tools, those tools interact in complex ways and that tools aren’t ends in themselves”. Librarians are accountable for the information they provide. If they are not now doing so, they should take every precaution to avoid the distribution of misinformation. The provision of false or misleading information through carelessness breaches the trust the patron puts in the librarian’s ethical duty to supply the highest level of service to library patrons, no matter the format of that information. In the end, librarians know that “a good library is defined by the principles of librarianship, the mission of the specific library, and the persons and services that make that mission a reality”. Technology will continue to change, and libraries and librarians will use the changing technology to provide the best access and service to their patrons. Librarians have seen technologies that will change the world come and go. The collections and the quality of the information, not its format, are what matter. As professionals, librarians can offer stability in the constantly changing waves of technology. When patrons enter a library or access a library electronically, they can rest assured that the information they find is reliable. If they cannot find the information, they can always ask a librarian for assistance.

According to Griffin as quoted by Biddiscombe (1999) the role of information professionals is to mediate the interface between users and knowledge resources, using tools and technologies. The purpose of that interface is to provide access to knowledge resources to individuals or groups of users. Basically, we can say that our domain, or our core function, is the mediation of this interface between the users and their needs, and the knowledge resources that exist, and we do that using a variety of tools and technologies. When I say “tools and technologies”, I’m not talking specifically about computer technologies. The tools include such things as classification schemes, indexing systems, data structures, directories, metadatabases, and so on. There is a variety of tools and technologies, not just computer-based and telecommunications technologies.

Rice-Lively and Racine (1997) support this view when they say “The role of the information professional is to intervene in the library user’s sense making and information-seeking process. First, librarians can “add value” to information for the user by assisting in the reduction of user uncertainty in response to the access and use of new information formats. Second, information professionals must intervene in the information seeking process to close the gap for the user between his or her information need by identifying and providing access to relevant resources.”

6.6 Core Competencies in automated environment in library:

Susan M. Thompson (2009) discusses the following core competencies required by the information professionals for working in any automated library. In a review of job announcements in College & Research Libraries News from the 2006 and 2007 issues Thompson (2009) discovered as the core technology competences for “digital collections librarian” position the following:
Institutional repositories and digital collections
Digital asset management system
Web technologies: page design, portals
Social networking technologies: podcasting, RSS, virtual worlds
Project management
Grant writing
Developing partnerships and working in teams

The technological competencies required in today's automated libraries are becoming more sophisticated. For instance the study of Choi and Ramussen (2009, p. 462) discovered that the technological competency requirements and experience appearing in their sampled job ads included:

Current trends, standards, technology in digital library; digital library environment; digital repositories in academic setting

Digital library software/digital asset management tools (DSpace, Fedora, Proquest Digital Commons); software/hardware applications used in organizing and presenting digital information

Digital library (initiatives/projects/strategies); digital information systems or services

HTML (coding practices), authoring tools/page editors

Competency on general technical; computer hardware and software applications; computer skills/computer literacy; PC and software packages

Information technologies and tools related to academic/online learning environment; technologies to support to support services and productivity; emerging technologies – implementation and management of; applying technologies to library services; information technology application development, design and deployment

Current state of IT and its role in Information Science; role of technology in research and academic libraries – understanding and commitment to

Mark-up languages/systems (XML, SGML, TEI, EAD, etc); productivity tools for XML mark-up

Programming/scripting languages (C, C++, Java, Perl); web programming

Database structure, creation and maintenance (design and administration), related technologies
As the libraries of HEIs in India embrace automation and IT more and more, such technological competencies are also expected now from the library professionals in India. India has made significant progress in the design and development of digital libraries and institutional repositories. There are about 25 working digital libraries/repositories at the national level and many universities and institutions have taken the initiative to design and develop institutional repositories and digital libraries of heritage or manuscript documents (Varalakshmi, 2009).

6.7 Staff training and development in automated library environment:

The wide variety of automation activities seen in the libraries of higher education institutions indicates the need for a library-wide information technology policy which encompasses the management and development of these resources as well as the staff development issues. A staff training and development policy is essential too and although this may be a separate document it should be compatible with the IT policy. It must also take into account the overall development plans of the library (e.g. the library five-year plan) so that the skills and expertise of the staff continue to match the developments and activities in the library. The responsibility of the staff development policy and process may lie with the Librarian, the Library training officer, or the staffing unit of the parent body. Staff development activities may include the following stages: an analysis of all training needs, the creation of a library-wide staff development programme, the implementation and finally the review of this programme. In some cases however this may differ. Rather than assigning staff training and development responsibilities directly to the
personnel librarian, which is common in many HEI libraries, a committee may be formed to coordinate these activities.

According to Sheila D. Creth cited by Callahan and Watson (1995) the benefits of staff training and development:

- Increasing the quality and quantity of work;
- Eliminating the need for close and constant supervision, thus freeing supervisors to make more effective use of their own time;
- Improving staff morale and job satisfaction by developing independent and competent staff, and
- Increasing organizational flexibility and stability by creating resourceful and adaptable staff.

In the 1970s, Conroy cited by Callahan and Watson (1995) made a distinction between staff development and continuing education:

Staff Development is intended to strengthen the capability of an organization to perform its mission more effectively and more efficiently by encouraging and providing for the growth of its human resources. Staff development affirms the ability of the individual and the organization to grow and for each to contribute to the growth of the other. Staff development makes the most of the present potential and prepares the individual and the organization for the future.

Continuing Education is learning opportunities utilized by individuals in fulfilling their need to learn and grow personally and professionally, following their preparatory education and work experience.

According to Creth cited by Callahan and Watson (1995) the scope of staff development:

Encompasses a range of activities designed to provide all levels and categories of library staff-professional and support staff, part-time employees, and volunteers-with the knowledge, skills and attitudes required for them to meet their current responsibilities and to adapt to future changes.

6.8 Training is part and parcel of library automation:

Many, while doing automation forget that staff training is part and parcel with it. Its importance is in the fact that technology after all has to be used by the human workforce to provide new and efficient service to the library users. Therefore, staff technology training, whether for a new automation system, for new software products, or the Internet must be considered first.

It's best to reassure that every professional requires trainings. Automation has brought in many changes in LIS education and profession. To keep up with the technological development and learn to accept these changes and pressure they belong above, the library professionals need continuous training and development in IT skills. It is essential at this time of upsetting changes to ensure that such training is not enabling them to improve their job performance,
but also providing them with supportive help as they acquire new and essential skills. The delivery of information is becoming increasingly entwined with the information itself and librarians and information professionals are increasingly involved in the management of networks, e-mail and Internet provision in their work places.

All training is an essential part of the development of professionals. The necessity of continuous professional training to the LIS professional is well said that 'training programmes should be an essential part of an overall programme of library development and continuing education for librarian at all levels. Library school curriculum and day-to-day work experience are no longer enough to keep librarian current with new development in the field or satisfy the needs of their institution/organisation or then personal career growth.

Staff development comprehensive continuing education is essential elements of general human resource and career development policies in libraries. Skill in IT can be gained only when one gets hands on training and experience in Laboratories under simulated conditions or in real life situations. The graduates and post graduates turned out by library schools don’t possess adequate skills and expertise to confidently interact with IT specialist, provide their requirements and evaluate what is recommended by IT specialists, provide their requirement and evaluate what is recommended by IT specialists.

One of the important reasons for underutilization of electronic information is lack of requisite level of working knowledge and consumption skills among customers and information intermediaries. Information intermediary is a vogue term which not only encompasses other than library and information professionals but also varies widely in the skills needed for performing their function. Even those professional who are already on job are severely handicapped if they don’t have enough scope, opportunities and self-initiations to absorb and update the necessary skills, expertise and knowledge relating to IT.

Another important aspect of managing people (both library staff and IT personnel) in this area is lack of interpersonal information sharing and the resultant covert non-cooperation and trade secrecy. New technologies are pretty easy to use but few can be effectively used without training. In case the library is introducing an automation system for the first time, it is better that the staff should be involved from the planning stage itself. By involving staff at all levels in the analysis of operations, the identification of needs, the setting of priorities, the development of specifications, and the evaluation of systems, staff will gain much of the general knowledge they need as the planning progresses.

To ensure that training programs are as effective as possible, the following tips should be kept in mind: (Cohn, Kelsey and Fiels, 1998).
1. Designate an individual or group of individuals who will work closely with supplier representatives and will have responsibility for on-going training.
2. Focus on those skills most relevant to day-to-day operations.
3. Work with small groups and provide hands-on experience.
4. Do practice-training on a small test group first.
5. Make sure that trainees can go back and actually use the system immediately after receiving training.
6. Always check your equipment, software and database prior to beginning training.
7. Ask trainees to evaluate training sessions and make changes accordingly.
8. Offer refresher training on a regular basis.

The library’s training programs should be continually evolving to meet the changes in technology, products, and services used by staff and provided to the library users. Therefore the library’s training programs must be constantly evaluated. In this way the training programs can be made stronger and more useful.

6.8.1 Training needs study:

An analysis of library staff training needs will indicate differences between different groups of staff, e.g. professional, clerical and technical, and differences within a group depending on an individual’s previous experience and current job description.

6.8.1.1 Training needs of senior managers:

Senior manager activities in all types of organisations include the creation and implementation of policies, the management of special systems or projects, and perhaps the line management of staff. Senior managers are likely to use automation as a management tool and they may have special responsibility for a particular library or information unit application. Ideally, all senior managers should be able to use common management packages, e.g. word processing, electronic mail, databases, spread sheets, graphics packages and desk-top publishing. In addition he should have knowledge of networking and communication technologies.

6.8.1.2 Training needs of Professional staff:

Professional staffs who have qualified in past few years are likely to have a sound understanding of information technology and to have experience of a wide range of computer-based systems as part of their educational course. For example graduates from the MLISc course at Gauhati University have experiences in handling systems like word processing, database, housekeeping, spread sheets, Email and the Internet. This was not possible until few years back. However, new professionals are unlikely to have in-depth, operational skills of some of the systems that they may be asked to use. (E.g., cataloguing systems and some online systems).
Professional staffs who have qualified more than five years ago are likely to vary in their skills and expertise with respect to information technology. Some are experts in information and in a wide range of automated systems (through their self-development study); others are computer literate and know one or two systems in depth, some may be computer literate but have no library work experience which relates to IT, while others may know nothing about IT (and possibly don’t want to learn anything about it).

6.8.1.3 Training needs of Clerical and technical staff:

Clerical staff is likely to have to be able to operate one or more computer systems. They are likely to have to be able to operate the system at a high level of detail in case of word-processing, database and spread sheet systems. Newly recruited clerical staffs are likely to have some information technology skills although they may have no experience of library systems.

Technical staffs are likely to be involved in setting up, operating and maintaining computer equipment. In many libraries as in case of IIT Guwahati Central library, the technical support is shared with the Computing Department and through outsourcing. This means that while a particular technician may have high level skills with respect to IT in general, they have little knowledge or experience with respect to specific library systems.

6.8.2 Who is the trainer?

Initially when a new automation system is installed in the library, the vendors should be made responsible for giving the training. Before asking the vendor to train the library staff it is necessary to consider the following points:

1. Describe in detail what you expect to receive from the vendor’s training programme.
2. State objectives clearly and ask for a detailed outline of the training offered, including the curriculum, the amount of time to be spent on each segment, the number of people to be trained at once, and the cost.
3. Ask what training aids the vendor will provide, such as training databases, manuals, workbooks, indexed and well-organized documentation, computer-aided instruction and instructional videos.
4. Request cost information on telephone support and follow-up, on-site training (Cohn, Kelsey and Fiels, 1998).

The training provided by a vendor is designed to train the library’s trainers. Usually there is a limit on the class size, for example, six to eight people per module. Thus, different staff members will be participating in different sessions, depending upon the module being covered. The library staff members being trained become the experts for that particular module and should be carefully selected for their ability to learn quickly and train other staff members.

Each staff member attending the vendor-provided training must be provided with his or her own workstation and sufficient desktop space for taking notes. If possible a lab with few PC workstations and an instructor’s station with the
ability to project to a wall-mounted screen will suit better. Such a training session must be typically, a day or two in duration.

6.8.3 Training methods:

Training for library professionals in automation can be done through various methods. These methods can be grouped as, (1) Pre-service training and In-service training, and (2) Formal and Informal. These are discussed in detail below:

1) Pre service training:

Pre service training in IT in India is provided by different library schools attaché to Universities, few colleges and institutions, library association and library networks. The topics covered include Computer Overview, Operating systems, working with Multimedia, power point, Networking/internet/e mail, Word, Excel, Database creation & management, and introduction to library management softwares like SOUL, LIBSYS etc.

2) In service training:

In service training can be 1. Induction training and 2. Refresher training

- Induction Training:
- Refresher training:

No matter how comprehensive the staff training activities are or how much staff practice occurred, there would be unanswered questions and wearing out effect over time. So, staff skills must be periodically refreshed through refresher training.

3) Formal and Informal training:

Training for information technology may take place formally and informally. Formal training can be divided into two categories-

- On-site training
- Off-site training

Informal training may take place in-house as a response to immediate demand for questions to be answered or the development of unexpected circumstances. Self-learning may include formal and informal methods of learning.
On-site training:

On-site training i.e. training which takes place in the library or parent organization, includes formal courses, workshops and individual training sessions, as well as informal sessions, individual assignments and projects. Internal training courses and workshops may be set up by the library using library staff as trainers or external trainers. The advantages of in-house training courses are:

- The course can more closely reflect the needs of the library staff
- The timing of the course can reflect the needs of the library staff (e.g. courses can be timed in relatively slack periods)
- In-house courses can be cheaper (e.g. there will be no staff travel expenses)
- Staff will be in familiar surroundings and will not have had to experience unfamiliar journeys before the start of the course (Allan, 1996).

The disadvantages of internal courses include:

- Possible lack of hardware and software needed for training groups of people
- Possible interruptions from ‘home library’
- Staff embarrassment, as a result of other colleagues being able to view the training sessions, which may result in a less successful training session
- Internal trainers will be coming to the course with a ‘history’ with respect to all the trainees and this may have the effect of lowering the effectiveness of the course (Allan, 1996).

Individual in-house training can be very effective method of training but it is expensive in terms of staff time.

Off-site training courses:

Off-site training programmes are those held outside the trainee’s library or parent library. Off-site training programs may include the following kinds of activities − courses, seminars, conferences, workshops, and visits. The disadvantages of library staff attending off-site training courses include the cost and time away from work. Also, it takes most people a certain amount of time to be sufficiently relaxed in new surroundings to be able to start the learning process. The advantages of off-site training programmes include:

- Coming into contact with new people
- Space and time to think about new ideas and systems
- Lack of interruptions from ‘home library’ (Allan, 1996)

Off-site training courses, conferences and workshops may be organized by the following types of organizations:

- Professional bodies and their sub-groups, e.g. LA, Aslib, ILA, IASLIC etc.
- Commercial organizations specializing in library and information science and systems, e.g. DIALOG, LIBSYS
- Library and information science schools, other educational organizations
- Library consortium e.g. INDEST and library information networks e.g. INFLIBNET, Delnet
But before sending library staff to any off-site training programs some aspects need to be clarified. Blanksby (quoted by Allan, 1996) has provided a useful checklist:

Who? Who is going to conduct the activity; do they have the necessary information about the trainees; do they have the appropriate subject and teaching skills; how much confidence in the trainer is the trainee likely to have; how much influence does the training manager have over the content?

Where? Is the location easy to reach; are there similar courses at more convenient or cheaper locations; is the location appropriately equipped and resourced; are there clear joining instructions?

What? How relevant is the content; is it up-to-date; is it pitched at an appropriate level; is IT involved – how many items of equipment, do trainees have to share, is up-to-date hardware and software used, is documentation available – is it of an appropriate content and quality, can the trainee take it home with them?

6.8.4 Training tools and techniques:

Blanksby (Allan, 1999) provides a useful summary of a wide number of training tools and techniques. These are described below:

i) Instruction
How – a task is demonstrated, the trainee is given time to practice, there is time for feedback and questions.

Reasons for failure – lack of preparation, trying to pack too much into one session.

Advantages – individualized tuition is possible

Disadvantage – time-consuming

ii) Demonstrations
How – equipment or systems are demonstrated to a group.

Reasons for failure – size of audience, equipment/systems does not work, location, individuals in audience not being able to see or hear the demonstration.

Advantages – relatively cheap, useful method of giving a systems overview.

Disadvantages – unsuitable for in-depth training, may result in raising fears rather than creating a positive attitude.

iii) Lecture
How – an individual gives a formal talk to an audience and there may be an opportunity for questions or discussion.
Reasons for failure – poor quality of lecture, poor or inappropriate content of lecture

Advantages – relatively cheap, can be used to provide a brief overview.

Disadvantages – large audiences can inhibit individuals, there may be no or little learning in this situation.

iv) Workshops
How – trainees are given the opportunity to use equipment/systems in a semi-formal manner and to interact freely with the trainers.

Reasons for failure – equipment/resources not available or not working, badly prepared learning resources, trainers not familiar with systems.

Advantages – this is possibly one of the most effective methods of staff training with IT as everyone has the opportunity for hands-on experience and obtaining individual help.

Disadvantages – expensive in terms of staff and trainers' time.

v) Visits
How – a tour or visit to another library, e.g. one which already uses an automated system.

Reasons for failure – systems failure, de-motivated host staff, visitors use opportunity to ‘confirm their prejudices’.

Disadvantages – visits can be used to give staff with no IT experience the opportunity to obtain an overview, see equipment and obtain a sense of how their job may be affected by IT.

vi) Simulations
How – trainees have the opportunity to use a simulation of an IT system, e.g. a simulation of an online system on a microcomputer.

Reasons for failure – systems failure, badly prepared trainers, poor documentation.

Advantages – can be relatively cheap, hands-on experience, trainees may use simulation without any time constraints.

Disadvantages – not the ‘real thing’, there may be minor differences between simulation and the real system.

vii) Manuals
How – an individual learns how to use a system by working their way through either a training manual and/or a user manual

Reasons for failure – manual may be badly written, incomplete, poorly presented

Advantages – cheap, trainees can learn at own pace and in their own time
Disadvantages – may be time consuming, trainee may find it a demoralizing experience.

vii) Technology-based methods (Slides, interactive videos, videos)

How – learner works through a videotape with accompanying learning materials

Reasons for failure – poor production and content, may need to use away from the workplace, e.g. in a training room, content may not be relevant to local need.

Advantages – provides visual images, can be used in a variety of locations.

Disadvantages – expensive in terms of production, facilities and equipment needed become dated quickly.

viii) Technology-based methods (information technology)

How – a computer system may incorporate its own training package.

Reasons for failure – systems failure, inappropriate content, poor presentation

Advantages – cheap, gives the trainee additional IT experience.

Disadvantages – may not suit local needs

Once staff technology training program begins it becomes an on-going process. This process must balance the changing needs of staff with available resources. This is particularly true for libraries of higher education institutions with its rapidly changing technology environment and dedication to software innovation.

ix) Self-learning:

According to Allan (1999), the term ‘self-learning’ is used to describe non-traditional modes of learning where learners have initiated their own training process and have control over what, when and where they learn. Many library professionals, particularly those with family commitments, may find difficult to attend full- or part-time courses. Additionally, some staffs are not offered the opportunities that they see themselves as needing from their own organization. For many unemployed library staff ‘self-learning’ may offer a route back to employment.

Self-learning is frequently used by library staff to teach themselves (perhaps from manuals) how to use particular systems. Studies undertaken by Babu (2007) et. al shows that self-learning is a very important method of getting training among library staff. Their study showed that 74.9 per cent of the respondents (ranked first), said that self-study was the method of acquiring ICT skills. Many software packages include useful training manuals which can mean quick and effective learning. Self-learning includes flexible, open and distance learning and it offers the learner the opportunity to improve their knowledge and skills in a variety of areas including information technology. A growing range of flexible learning courses are becoming available now.
The Open University is one of the major procedures and deliverers of open-learning in the world. In India the Indira Gandhi National Open University (IGNOU) besides providing MLISc courses also offers specific courses on IT application in library.

6.8.5 Evaluation of training

Evaluation of training and development programs is often either overlooked completely or is done with little thought. Regarding this Callaghan and Watson (1995) writes:

"While no library today is rich enough to squander precious money and staff time on training that doesn’t stick, we pay little attention, if any, to the long-term results of our training programs. Training is regarded as complete when the workshop was attended. The real test of a program’s success is whether or not the trainee is using the new knowledge six months after attending the program”.

A successful library and training program operates with the conviction that activities which contribute to the effective performance of each individual will strengthen the entire organization and that training and development are part of a continuous process. Because what is accomplished carries over from year to year, the evaluation process should be designed to provide information for the standing committee as well as subsequent ones. It must provide reliable information about enhanced knowledge, job skills, and productivity. It is also important to make the best use of feedback by responding to suggestions for program alterations or improvements in order to guarantee that the desired training objectives are met.

Lengthy evaluation forms can be tedious; brief and to the point is best. Evaluation forms can be distributed not only at the close of each session, but also at the end of the year, at which time employees are asked which programs they liked best and why, which sessions they found most useful for their jobs, whether or not they were able to apply what they had learned, and which programs they thought should be repeated or expanded. Other questions to ask include: What training needs (directly job-related) and development needs (indirectly job-related) would you like to see addressed? What additional skills do you require in order to improve your job performance? The committee should acknowledge the value of staff input in regard to training needs. This is an opportunity to practice the concept of team learning, and employees will understand that organizational learning comes from the staff as a whole. The primary key to the success of any training and development program is administrative endorsement” (Callaghan and Watson, 1995).
6.9 Continuing Professional development (CPD):

The Library Association quoted by Parry (1996), defines Continuing Professional development (CPD) as:

“The systematic maintenance, improvement and broadening of knowledge and skills and the development of personal qualities necessary for the execution of professional and technical duties throughout the practitioner's working life”.

CPD extends beyond immediate training needs and encourages a wider and longer view of the needs of individuals. Organizations must support CPD because in automated environments staff requires different skills that must be regularly updated. Often staff development activities are difficult to organise in face of time and money constraints and lack of appropriate trainers. Organizations with a strong reputation for supporting CPD may find that they attract new high-calibre recruits. Professional development benefits both the individual and the institution. For the individual, the ongoing process of acquiring new information and skills promotes job competencies for performance upgrades and promotion. On the psychological level, heightened competency may reduce job-related stress and increase interest, promoting job satisfaction. Due to its persistent and lasting nature, professional development is known also as "life-long learning."

- Opportunities for CPD:

Opportunities for learning can crop up unexpectedly so everyone needs to be prepared to take full advantage of new experiences and to learn from others, even in informal situations. According to Parry (1996) opportunities for professional development can be found in:

- Learning from the example of others
- Professional reading
- Coaching or mentoring
- Job exchanges
- Attending courses or conferences
- Participating in different activities
- Open learning
- Distance learning
- Training others
- Attending meetings

6.10 Staff Training and Development activities in HEI libraries in North East India:

Human Resource Development in HEI libraries in India is not an unusual concept. As early as in the year 1957, a library committee was established by UGC under the Chairmanship of Dr. S. R. Ranganathan. As quoted by Devi and Singh (2006), the report of this Committee was published by the UGC in the
year 1959 under the title “Development of university & College Libraries”. Library manpower was one very important aspect of the report. The report gave due importance to the pay scale and training of the staff so that they could meet the challenges. UGC accepted almost all the recommendation of Library Committee (1957). As a result, a staff formula for the university and college libraries was formulated and the status and salary of library staff were made at par with the academic staffs. Today, there are numerous players for providing professional development and training to the library information professionals working in the libraries of HEI in India. Providers and delivery models for professional development resources are as diverse as the potential range of desired content. They run the gamut from formal programs with a big price tag, to informal free sessions sponsored by one's own department. The primary providers, familiar in the working life of most librarians, are the professional associations e.g. ILA, IASLIC, SIS, educational institutions, and private vendors of library products and systems. There are also specialized institutions created by the Government of India that are actively engaged in training and development of library information professionals such as NISCAIR, DRTC, Central reference Library, Kolkata, National Library etc. Also there are few networks of libraries and consortia like INFILIBNET, DELNET, and INDEST. The roles of each of these parties are discussed below:

6.10.1 Professional Associations

The conferences and meetings sponsored by professional associations provide a forum not only for learning, but also for professional exchange. Presentations, posters, panel sessions, exhibits-- all bring people in the profession together, keeping them abreast of current trends, problems, and solutions. Associations also sponsor single-subject sessions and courses. Library Associations have taken important initiatives for growth and development of LIS education as well as LIS profession. These associations vary in scope and coverage depending. In north-east India, some state level associations are also there in addition to two/three national level associations. In Arunachal Pradesh and Sikkim, there is no library association. In Assam, there are a few library associations, viz., Assam Library Association, Assam Public Library Service Association, Assam College Librarian's Association, Guwahati Library Association, Rural Library Association, and Government Library Association. Of these, Assam Library Association is at present working actively. In Manipur, two associations, viz., All Manipur College Library Association (AMCOLA) and Manipur Library Association (MALA) are functioning. MALA is organising certificate courses. Meghalaya Library Association was formed in 1994 and is conducting certificate courses in collaboration with NEHU. In Nagaland, the Nagaland Library Association (NLA) was established in 1996. Mizoram Library Association (MILA) is the only library association in the state. One of its objectives is to conduct training on library technologies. YMA (Young Mizo Association) is also playing a vital role for the public library service and movement in Mizoram. In Tripura, there are two Tripura Library Association (TLA) and Nikhil Tripura Granthagar Parishad. TLA conducts certificate course.
National level professional associations like Indian Association of Special Libraries and Information Centres (IASLIC), Indian Association of Teachers of Library and Information Science (IATLIS), and Indian Library Association are also active. IASLIC has created one Education Division to organise short-term training courses/workshops/round-table meetings on various topics to improve professional competencies. These programmes are also organised in NE region. IASLIC conducts seminar/conferences/SIG meetings on “LIS Education”. Their outcomes/recommendations have been either adopted by the UGC review committee or have been used as guiding factors for UGC-CDC (Panigrahi, 2010).

6.10.2 College and University Resources

HEI libraries, being already housed in educational institutions, are exceptionally rich in educational resources. Many grant partial or full tuition waivers for employees to pursue coursework and degree programs. About one third of the librarians at Northern Illinois University Libraries, for example, have taken advantage of this resource. Three librarians have been taking classes in a Ph.D. program; three librarians have already obtained master's degrees, two of them subsequently having been promoted to faculty status from staff; four people are studying for their master's degrees. A number of others take occasional coursework for subject content, but not related to a degree program.

Assam has extended scope of LIS education to provide opportunities training for more students in comparison to other states of the N-E India. Two state universities (Gauhati and Dibrugarh) and one central university (Assam University) are offering LIS Education. Assam University is the new entrants in this list, which is offering 2-year (4 semesters) integrated MLIS course from 2010. Gauhati University is the oldest one to impart LIS education for entire N-E region. It is offering 2-year (4 semesters) integrated MLIS and PhD programme. But Dibrugarh University is offering truncated one-year BLIS and one year MLIS programmes. None of these 3 universities are having MPhil course in LIS (Panigrahi, 2010). Department of library and Information Science (DLIS) of Manipur University offers two-year integrated MLIS programme and PhD. DLIS of NEHU, Meghalaya gives two-year integrated MLIS programme and PhD. DLIS of Mizoram University gives two-year integrated MLSc, MPhil and PhD. In Sikkim DS College, Gangtok, started BLIS in 2004. Tripura University has recently started (2010-11 sessions) a BLIS course in Ramthakur College, one of its affiliate. LIS Education has not started yet in Arunachal Pradesh and Nagaland.

During the recent years many of the DLIS departments have revamped their LIS curriculum to suit the present need of technological expertise in the libraries. DLIS of GU have introduced more practical based IT training and theory subjects in its new syllabus.

A study done by Panigrihi (2010) found that Gauhati University has organized 2 National level Conferences, 4 Workshops, and few UGC Reference Courses, Dibrugarh University organised Class Seminars and 1 State level workshop, Assam University 1 Workshop. In Meghalaya NEHU organised 1 International,
In addition to taking advantage of the many formal opportunities for continuous learning, HEI libraries can forge their own professional development programs, either internally, or in affiliation with neighbouring and consortia libraries. These alternatives offer a great deal of flexibility in meeting unique organizational and staffing needs, and in a period of decreasing budgets, are attractive for their lower costs.

6.10.3 Other Resources

The professionals who join a particular HEI library have little scope of receiving in-house training facilities. However for the much needed training in automation there are few organizations that organize courses on library automation. These facilities are discussed below:

6.10.3.1 INFLIBNET:

Information and Library Network (INFLIBNET) was created by UGC to provide technical and financial assistance to the HEI libraries in India. Besides having activities like establishment of computer facilities, software development, database creation and in establishing computer communication/networking of libraries, it has an important program of promoting HRD in the HEI libraries. It provides both on-site training and off site training to the library manpower of the HEI libraries. INFLIBNET also organises Annual National Conventions called CALIBER (Convention on Automation of Libraries in Education and Research Institution). This Convention provides a unique forum to the library professionals, information providers and users involved in automation and networking of libraries to come together and interact on the subjects of mutual interest. PLANNER stands for "Promotion of Library Automation and Networking in North Eastern Region". INFLIBNET has been organizing this event in collaboration with Universities and other Academic institutions located in North East of India. This convention provides a unique forum to the library professionals, information providers and users involved in automation and networking of libraries to come together and interact on the subjects of mutual interest in the region. INFLIBNET Regional Training Programme on Library Automation (IRPLA) is organised to give training for SOUL softwares. Till 26th - 30th July, 2010 it has organised 85 training Programme on SOUL in different parts of India (www.inflibnet.ac.in).

6.10.3.2 DRTC

DRTC (Documentation Research and Training Center) was established in January 1962 is engaged in various kinds of continuing education activities. As part of this DRTC annually organises workshops and seminars for continuing
education. Besides this it also organises training programmes on application of IT in libraries.

6.10.3.3 NISCAIR

National Institute of Science Communication and Information Resources (NISCAIR) is equipped with the necessary facilities and manpower to train and prepare library and information professionals for meeting the challenges of current times (NISCAIR, 2007). NISCAIR's HRD Programmes can be broadly categorized as follows:

**Associateship in Information Science.** The objective is to train the students in techniques of information handling and management with special emphasis on application of information technology for designing, implementing, operating and managing information systems.

**Short-Term Courses.** NISCAIR organizes short-term courses on various topics, particularly in areas of information technology, computer applications and science communication.

**Attachment Training Programmes.** NISCAIR organises regularly on-the-job training or attachment training programmes for persons requiring specialized training in the field of information science, information management, information technology and related activities.

6.10.3.4 NISSAT

The education and training of information personnel is one of the thrust areas of the NISSAT (National Information System for Science and Technology). NISSAT has been encouraging and supporting a variety of short-term courses in the area of Information Science and Technology such as Application of computers in library and information centres; Use of personal computers and CDS/ISIS; Total quality management (TQM) in library services; Scientific and technical communication; Scientometrics and bibliometrics; computerised cataloguing; CD-ROM/Online search; Modern information access facilities to business and industry: Common communication format; AACR-II; IDAMS; Sanjay software package; MIS for library; Internet, HTML, Web design; Marketing of information services and products; Patent information, Copyright, etc. in various parts of the country. Sarkar (2001) has made a detailed study on its role in the area of HRD in library and information science.

6.10.3.5 Academic Staff Colleges:

The Academic Staff Colleges set up by the UGC in different parts of the country impart orientation, in-service training and continuing education for the teaching community and library staff as well. In NE India there are four Academic Staff Colleges one each in the state of Assam, Meghalaya, Manipur and Mizoram. According to Panigrahi (2010), UGC Refresher Courses have been organised by the Academic Staff College of the Universities to train teachers on LIS and
Librarians to keep them up-to-date, but it has been realised that such Refresher Courses need to be restructured.

HRD is critical for automation of libraries of HEIs. Due to library automation the competency level of the library staffs have broadened very much. It is also true that application of numerous automation technologies in libraries of HEI have necessitated many functional changes as well as creating new library jobs. It is also true that technology keeps on changing rapidly. The solution to cope such problems lies in the application of HRD in the libraries. Through regular training and other staff development activities the library workforce can be maintained well equipped and energized to perform their duties efficiently in the automated environment.