CHAPTER-I
INTRODUCTION

1.1. Introduction

Education is the passport to accelerated economic growth. It is the key to build human capital. Human capital is the vital ingredient in building a nation. Education is a crucial building block, that recognized as pre-requisite for the general development programme. Since long time immemorial education formed a continuous basis for the development of society, “Education in whatever form has to respond expeditiously and effectively to the changing needs in an ever changing society”\(^1\) as change is the only unchanging law.

Education is a process of learning with the aim to develop the capabilities in the people at all levels. In this process, schools, colleges and universities play a vital role. The present educational system in India comprises both academic and professional studies by offering courses leading to bachelors and master’s degree.

“Indian higher education system has undergone massive expansion in Post-Independent India with a national resolve to establish several Universities, Technical Institutes, Research Institutions and Professional / Non-Professional Colleges all over the country to generate and disseminate knowledge coupled with the noble intention of providing easy access to higher education to the common people in Indian”\(^2\).

The colleges have a significant role to play in educational process. In consonance with the accepted dictum that the colleges or institutes are citadels of learning \(^3\), it should not only cater to the needs of academic excellence, but also help indirectly in the prime goal of achieving national development. They represent major investment in the development of human resources. In this direction colleges should be conscious of their obligation to community in general. To yield maximum results the college should be organized and developed as to serve the objectives with which they can come into existence.

The Colleges are institutions engaged in the advancement of knowledge; they teach, train in scientific and professional fields. Intellectual pursuits in colleges define
the highest prevailing levels of competence in these fields. The colleges confer
degrees and provide opportunities both for members and their teaching staff.

1.2. The Objectives of College Education Outline by UGC

Objectives of College Education as outlined by University Grants Commission are:

(i) To inculcate and promote human values and capacity to choose
    between alternative values systems.

(ii) To preserve and foster our greatest cultural traditions and blend them
    with essential elements from other cultures and people.

(iii) To promote a national outlook and scientific temper to enrich the
    Indian languages and promote their use as important means of
    communication national development and unity.

(iv) To act as an objective critic of society and assist in the formation of
    national objectives and programmes for their realization.

(v) To promote commitment in the pursuit of excellence.

(vi) To promote the development of science and technology and indigenous
    capacity to apply it effectively with special emphasis on national
    problems and above all.

(vii) To contribute to the improvement of the entire educational system as to
    sub serve the community^3.

Ever since India becomes independent bidding a good bye to the British
imposed ideology, the state has assumed its responsibility becoming instrumental in
creating a new society and a new economic order. In that direction the state has been
responding continuously to both Scientific and Technological advances, social and
economic needs.

1.3. Professional Bodies in India

Education in India is matter of prime concern for the government of India. The
University Grants Commission (UGC) coordinates, determines and maintains the
standards of education at various levels. There are many professional bodies, which are responsible for accreditations of the courses, as well as providing grants to the different undergraduate courses. India, with its diversity fascinates one and all. Indian Education system has recently gained world recognition. Many students from foreign countries are eyeing the country for gaining higher qualifications. Though, illiteracy is a problem in India, the country it amazes outsiders with its vast pool of talent. The Indian economy has grown in leaps and bounds in the recent years and hence there is a necessity to educate the masses to accelerate the growth process. It is interesting to note how the Indian education machinery works.

The Professional Councils in India are:

1. All India Council for Technical Education (AICTE)
2. Indian Council for Agriculture Research (ICAR)
3. Distance Education Council (DEC)
4. National Council for Teacher Education (NCTE)
5. Bar Council of India (BCI)
6. Medical Council of India (MCI)
7. Rehabilitation Council of India (RCI)
8. Indian Nursing Council (INC)
9. Central Council of Homeopathy (CCH)
10. Pharmacy Council of India (PCI)
11. Central Council of Indian Medicine (CCIM)
12. Dentist Council of India (DCI)

1.4. Education System of India

Till the recent past was believed that premier education is not available in India, but the current development in the educational sector has led to the belief that quality education is indeed available in India. Research done in the past has highlighted loopholes in the curriculum and methodologies but these criticisms had acted upon and amendments were made. These included changes in the syllabus,
introduction of new courses and dynamic methodologies. Modern infrastructures and teachers with adequate training are facilitating cutting-edge delivery of content; connected E-learning (called C-learning) is in vogue, and today India is attracting students from South Africa, China, Canada, France, Germany, Canada, Australia, UK and USA.

This unbelievable progress in the educational scenario also includes low costs of tuitions as compared to the western countries. The basic divisions in the academics include primary, secondary, senior secondary and higher education. Elementary education is till standard 8 while secondary and higher secondary education consists two years each. Graduation is between three to five years depending on the course also there is an option for post-graduation (a two-year course) and research.

Today education system in India can be divided into many stages.

1. **Pre- Primary** - It consists of children of 3-5 years of age studying in nursery, lower kindergarten and upper kindergarten. At this stage student is given knowledge about school life and they will be taught to read and write some basic words.

2. **Primary** - It includes the age group of children of 6-11 years studying in classes from 1st to 5th.

3. **Middle** - It consists of children studying in classes from 6th to 8th.

4. **Secondary** - It includes students studying in classes 9th and 10th.

5. **Higher Secondary** - Includes students studying in 11th and 12th classes.

6. **Undergraduate** - Here, a student will undergo higher education that is completed in college. This course may vary according to the subject pursued by the student. For medical student this stage is of four and a half years plus one year of compulsory internship, while a simple graduate degree can be attained in three years.

7. **Postgraduate** - After completing graduation a student may opt for post graduation for additional qualifications.
1.5. Education Governing Bodies

1. The Central Board of Secondary Education (CBSE): This is the main governing body of education system in India. It has control over the central education system. It conducts exam and look after the functioning of schools accredited to central education system.

2. The Council of Indian School Certificate Examination (CISCE): It is a board for Anglo Indian Studies in India. It conducts two examinations 'Indian Certificate of Secondary Education' and 'Indian School Certificate'. Indian Certificate of secondary education is a k-10 examination for those Indian students who have just completed class 10th and Indian school certificate is a k-12 public examination conducted for those studying in class 12th.

3. The State Government Boards: Apart from CBSE and CISCE each state in India has its own State Board of education, which looks after the educational issues.

4. The National Open School: It is also known as National Institute of Open Schooling. It was established by the Government of India in 1989. It is a ray of hope for those students who cannot attend formal schools.

5. The International School: It controls the schools, which are accredited to curriculum of international standard.

1.6. Present Scenario of Education System

The present educational system of India is an implantation of British rulers. Wood's Dispatch of 1854 laid the foundation of present system of education in India. Before the advent of British in India, education system was private one. With the introduction of Wood's Dispatch known as Magna Carta of Indian education, the whole scenario changed. The main purpose of it was to prepare Indian Clerks for running local administration. Under it the means of school education where the vernacular languages, and the higher education was granted in English only. British government started giving funds to indigenous schools which are in need of help and thus slowly some of the schools became government-aided. Contemplating on the new system which was introduced Mahatma Gandhi expressed his anguish in
following words, "I say without fear of my figures being challenged successfully, that today India is more illiterate than it was fifty or a hundred years ago, and so is Burma, because the British administrators, when they came to India, instead of taking hold of things as they were, began to root them out. They scratched the soil and began to look at the root, and left the root like that, and the beautiful tree perished. The village schools were not good enough for the British administrator, so he came out with his program. Every school must have so much paraphernalia, building, and so forth. Well, there were no such schools at all. There are statistics left by a British administrator which show that, in places where they have carried out a survey, ancient schools have gone by the board, because there was no recognition for these schools, and the schools established after the European pattern were too expensive for the people, and therefore they could not possibly overtake the thing. I defy anybody to fulfill a program of compulsory primary education of these masses inside of a century.

1.7. The recent initiatives of the government include the following:

1. An Information Technology teacher should be appointed in every school.

2. The ICSE and CBSE curriculums have gained eminence.

3. Unit tests from Class 1 to Class 8 has been done away with in Maharashtra.

4. Foreign universities are being given green signals to open campus in India. These universities are also collaborating with Indian institutions to disperse combines curriculums.

1.8. Historical Background of Indian Education

Traditional Indian education boasts of the Vedas, the Puranas, the Ayurveda, the Arthasashtra, and many more and is a marvel of the Indian intellect. In the system of Gurukula (ancient Indian system, Education gaining of knowledge) the adolescent boys stayed in the house of the teacher (guru) to gain knowledge over a stipulated time of period. The Brahmacharya (celibacy) state was observed till a certain age while women and lower caste people had no access to education in the Middle Ages. The reform movement spread by the Sufi, Bhakti, Jain and Buddhist religions reduced the pain of the oppressed segments of the society and educational reforms gained eminence in the nineteenth century. After independence, education for all was the
mission of government. The unhealthy practice of discriminations was removed by 86\textsuperscript{th} Constitutional Amendments and education has been made compulsory for the age group 6 to 14. The significant gap between the rate of urban and rural literacy is being bridged and the UGC was set up in the year 1953 to regulate the processes of educational development in the country. Currently, there are more than 17000 colleges, around 20 universities (central), 217 universities (state), and many deemed universities as well as national institutions. The national institutions of international fame are the IIT's and the IIM's. The Indian School of Business (ISB) in Hyderabad holds a global rank of 15 in the field of management education.

However, the efforts of upgrading the standards of Indian Education are not meeting with success, due to hurdles in accessibility, poverty and other factors. Due to widespread of poverty the government of India is unable to achieve higher success in the implemented projects. The 11th 5year plan alleviates the importance of development in the education sector and primary education as well as higher education is given equal importance in this plan.

1.9. Technical Education

Technical Education in India contributes a major share to the overall education system and plays a vital role in the social and economic development of our nation. In India, technical education is imparted at various levels such as: craftsmanship, diploma, degree, post-graduate and research in specialized fields, catering to various aspects of technological development and economic progress.

In an expanding system of education, Institutions should grow to its maximum and be capable of adjusting to the anticipated changes and be prepared to meet the challenges of new situations. This is true with engineering education also. In the Pre-Independent Era, facilities for advanced studies and research in Engineering were hardly provided, remained stagnant over a long time.

Technical Education contributes to the National Economy and paves way for the improvement of the life of people, thus leading to self-reliance. The policy of state lays stress on securing for the people, the benefits from acquisition of scientific knowledge and practical application of research. The policy is aimed at encouraging
individual initiative for dissemination of knowledge and foster programme for scientific training and personnel.

Technical Education has a dual purpose to serve, aiming at not only training the professionally competent engineers, but also to bestow more attention in the creation of a new society on the lines of new economic order. To achieve these objectives technical education has to respond to the ever changing and increasing scientific and technological advancement. The five year plans of the nation reflect policy in expanding the facilities at higher technical education. The five year plans envisaged at bringing qualitative development in technical education through development of faculties and curriculum. The Engineering and Technology panel, an advisory body constituted by the University Grants Commission suggested various measures for the improvement of the standard facilities in teaching and research for development of inter disciplinary and multi-disciplinary programmes.

The sixth five year plan emphasized the quality of technical education at all levels, and in furtherance of national interest develop and apply science and technology as an instrument for country’s socio economic progress. The part played by the department of human resources in the Indian development strategy is noteworthy. National Policy on Education, adopted way back 1968, called for a radical reconstructions of education, transform it to be useful to society, to expand educational opportunities, and raise quality of education and improving science and technology. The National Policy on Education 1986, sought to establish a national system of education by lying down curriculum frame work, aimed at establishing an egalitarian democratic secular society. With the avowed objectives in mind it laid down that educational transformation, reduction of disparities, universalisation of elementary education, adult education, scientific and technical research should be accepted as national responsibilities. The mere laying down of polices in sonorous terms serves no mundane purpose. To give practical shape to the objectives, the state should cater to the needs of the student community by being helpful in creating an atmosphere congenial to improve their scholastic ability and competence.

The best can be achieved only when there comes in, revolutionary change in the role of libraries, as libraries act as a mighty force. Libraries handle and manage knowledge and information. Library has to be a living organism as it has to grow to
meet the challenging requirements of its users. The libraries should cease to be mere storehouses of knowledge and become important in the promotion of social scientific and technical progress. Library is an instrument in the dissemination of information, essential to the advancement of knowledge, in particular and to the growth of society at large. In the modern society library plays a crucial role in the centralization of knowledge for innovations of technology as a key tool for generation of wealth.

The continuing revolution in the world of technology has transformed the traditional pattern of education, made each country to consider education as a moral key to prosperity, stability and security. The education should be so designed as to build a dynamic vibrant society in the 21st century. It is difficult and impossible to describe a library, more so a college library devoted to technical aspects. Such a library varies substantially from one college to another. Libraries catering to the educational information needs of all disciplines should have capacity to grow to maturity in line with sophisticated modern gadgets and Professional College libraries are no exception. Keeping in view the futuristic needs, Engineering College libraries have to project themselves to meet the challenges of the present day trend in making information and data available to the user from all over the world, providing him access to the information needs through Web based, distant learning, and electronic books. The information explosion resulted in adoption of automation to improve the operational ability of the libraries.

1.10. Professional College Libraries

The mass growth of literature resulted in the demand for the latest information. 20th century is paving way for the next millennium and it is not many years away. In this age of Science and Technology, the scientific research should form an integral part since the key to academic and economic prosperity lies in the advancement of science and technology. It is high time that the Professional colleges should aim at a programme for promotion and support of information technology by an interlinking network, which only serves the user interests. The demand for information has grown at a faster rate, with a wider geographical coverage especially in the technological field. The library should be capable of providing access to scientific literature comprehensively, speedily and economically on which progress of
science rests. The most recent literature of a vast geographical coverage is for unimpeded growth.

1.11. Importance of Professional College Libraries

The Professional or Technical libraries are major source of information in the organization it serves. The core function of the Professional college libraries is to provide books and other library materials to its clientele at the right time. A library can be effective only if its role and functions are definitely distinctive. Distinctive in the sense that Professional Colleges should possess a library exclusively for their use dealing only with the specialties concerned individual libraries maintained by the Indian Institute of Technology, Medical and Agricultural Colleges and the Indian Law Institute.

All Professional Colleges under the departmental libraries attached to them careering to the needs of their clientele as subsidiary units of the central libraries. If Professional College maintains a separate library for the Professional disciplines, it may better serve the needs of the users in the most optimum way. Almost all the professional college libraries are attached to the institutions or organizations.

“'A well-equipped and well-managed library is the foundation of modern educational structure. It is said that education without library services is like a body without soul, a vehicle without an engine, and building with bricks but no cement. The library is the chief instrument for accumulating and using our intellectual heritage”

1.12. Role of the Professional College Libraries in Promoting Higher Education and Research

The Role of professional College libraries is much more importance in education and research activity, Library is an essential pre-requisite for successful implementation of educational and research programme. Without the help and ready co-operation of a library no formal educational programme can be fruitfully completed. The library should provide facilities and services necessary for the success of all formal programmes of instruction, open the door to the world wide information
sources, students and scholars together under conditions which encourage reading for pleasure, self-discovery, personal growth and sharpening of intellectual curiosity.

1.13. Automation in Professional College Libraries-Need of the Hour

Today, the concept of library is regarded as a service institution. Its main aim is to enable the users to make the most effective use of the resources and services of the library. Computers play a vital role to control this information explosion. According to Bernard Karsh “Library Automation is the accomplishment of a task by an integrated power driven mechanism entirely instead or direct application of human energy, skill, intelligence or control”6.

Library automation, which was started in India in late 1970s in only few special libraries, has now reached most of the academic libraries. Computerisation was started in the libraries to increase the efficiency and effectiveness of the library operations and services. Development and use of Information Communication Technology (ICT) has enabled the libraries not only to offer their clientele the appropriate information available within their libraries but also provide access to information of other libraries, both local and outstations. In the current scenario there is a greater responsibility on the libraries and information centres to provide the latest and timely information to their users to facilitate improvement in the quality of education in the country and this cannot be done until each institution has an efficient library and information management systems at its command.

Library automation systems are elaborately designed and crafted computer applications that require considerable programming skills together with an extensive knowledge of the functional needs of libraries and the exacting standards that are applied in their libraries. Software technologies used in library automation systems include database management systems, client-server architecture, search engine technology, and increasingly software used in web based applications.

Automation provides the means to offer new improved services to its patrons. The automated library functions are acquisition, cataloguing, classification, circulation, serials control, bill payment, budgeting, reminders and reference services.
1.14. Data Bases

An Electronic library in contrast with that or a traditional library is a database house, which can be accessed by public via CD-ROMs or telecommunications network, online information in relation to abstracting, including full text reports and reference bibliographies and other data bases started with or by a group of organization. CD-ROMs (Compact Disc Read only Memory) can be supplied on users demand. CD ROMs Data Bases are very useful in developing countries which do not have the necessary telecommunication facilities to link with the remote online search services. Current Contents’ now produced and supplied on CD ROMs by the Institute of Scientific Information may be considered as an example for the same. The endeavour of the Engineering index in starting an integrated project under the name and style ‘Engineering village’ providing access to a wide range of Data Bases and other information services and web sites herald another new beginning.

Electronic Resources play an important role in Professional Education. The success of education in academic institutes largely depends upon information sources available and their use in libraries. Library is a repository of information sources. For various reasons, computers and related e-resources occupies prominent part in library resources. Since the availability e-resources suit to be budgetary provision and use. Friendly, their use in libraries increasing rapidly. Electronic Resources or E-Resources include E- Books, E-Journals, E- Thesis, E-Databases, Web Portals, Gateways, E- Directories and E- Technical Reports including E-Articles.

1.15. Internet and its Use in Professional College Libraries

In the era of networked information, Internet, the largest worldwide network of networks, has emerged as the most powerful tool for an instant access to information. Information is now just a ‘finger touch’ distance away from the user and it would not be inappropriate to say that the Internet has become the biggest global digital information library which provides the fastest access to the right kind of information in nano-seconds of time to end-user at any time and at any place in the world. The Internet has become most extensively source of information that empowers the average person to get in roaming with the latest information. Current
users can no longer depend on conventional information sources to cope with the latest developments in their respective fields.

The Internet has emerged as a powerful educational tool. With the increasing impact of information and communication technologies on higher education, all those concerned with higher education are attempting to grasp how ICT could help in modernizing the process of teaching, learning and research. With the advent of the Internet, following dilemma arise in higher educational system:

Learner is not dependent on teacher for interaction; and

Teachers can give lectures virtually to unknown learners.

So, in this era, teachers and students can carry forward their work on the Internet in ways that are similar to and tightly intertwined with the traditional ways that they learn, teach and study in libraries, classrooms, laboratories, seminars, conferences, etc. Internet can provide access to unlimited resources of information that can’t be conventionally obtainable through other means.

1.16. Indian National Digital Library in Engineering and Science and Technology (INDEST)

The “Indian National Digital Library in Engineering Sciences and Technology (INDEST) Consortium” has set up in 2003 by the Ministry of Human Resource Development (MHRD) on the recommendation of an Expert Group appointed by the Ministry. The IIT Delhi has been designated as the Consortium Headquarters to coordinate its activities. The Consortium was renamed as INDEST-AICTE Consortium in December 2005 with the AICTE playing a pivotal role in enrolling its approved engineering colleges and institutions as members of the Consortium for selected e-resources at much lower rates of subscription. The Consortium enrolls engineering and technological institutions as its members and subscribe to electronic resources for them at discounted rates of subscription and favourable terms and conditions. The Ministry provides funds required for subscription to electronic resources for 62 centrally-funded Government institutions including IITs, IISc Bangalore, NITs, ISM, IIITs, IIMs, NITTTR’s and few other institutions that are considered as core members of the Consortium. The benefit of consortia based
subscription to electronic resources is not confined to its core members but is also extended to all educational institutions under its open-ended proposition. 60 Govt./Govt.-aided engineering colleges are provided access to selected electronic resources with financial support from the AICTE and 102 universities /institutions have joined the Consortium under its self-supported category in 2012. The total number of members in the Consortium has now grown to 1235.

The INDEST-AICTE Consortium is the most ambitious initiative taken so far in the country. It is the biggest Consortium in terms of number of member institutions in Asia. The Consortium attracts the best possible price and terms of agreement from the publishers on the basis of strength of its present and prospective member institutions. The Consortium subscribes to over 12,000 electronic journals from a number of publishers and aggregators. The consortium website at http://paniit.iitd.ac.in/indest hosts searchable databases of journals and member institutions to locate journals subscribed by the Consortium, their URLs and details of member institutions.

1.17. National Library and Information Services Infrastructure for Scholarly Content (N-LIST)

The Project entitled “National Library and Information Services Infrastructure for Scholarly Content (N-LIST)”, being jointly executed by the UGC-INFONET Digital Library Consortium, INFLIBNET Centre and the INDEST-AICTE Consortium, IIT Delhi provides for i) cross-subscription to e-resources subscribed by the two Consortia, i.e. subscription to INDEST-AICTE resources for universities and UGCINFONET resources for technical institutions; and ii) access to selected e-resources to colleges.

The N-LIST project provides access to e-resources to students, researchers and faculty from colleges and other beneficiary institutions through server(s) installed at the INFLIBNET Centre. The authorized users from colleges can now access e-resources and download articles required by them directly from the publisher’s website once they are duly authenticated as authorized users through servers deployed at the INFLIBNET Centre. The project has four distinct components, i.e.) to subscribe and provide access to selected UGC-INFONET e-resources to technical institutions
(IITs, IISc, IISERs and NITs) and monitor its usage; ii) to subscribe and provide access to selected INDEST e-resources to selected universities and monitor its usage; iii) to subscribe and provide access to selected e-resources to 6,000 Govt./ Govt.-aided colleges and monitor its usage; and iv) to act as a Monitoring Agency for colleges and evaluate, promote, impart training and monitor all activities involved in the process of providing effective and efficient access to e-resources to colleges.

The INDEST and UGC-INFONET are jointly responsible for activity listed at i) and ii) above. The INFLIBNET Centre, Ahmedabad is responsible for activities listed at iii) and iv) above. The INFLIBNET Centre is also responsible for developing and deploying appropriate software tools and techniques for authenticating authorized users.

**Vision and Mission:**

- Access to scholarly information for all educational institutions
- Bridging digital divide and moving towards a information-rich society
- Provide access to subscription-based scholarly information (e-books and e-journals) to all educational institutions
- Provide access to scholarly content available in open access through subject portals and subject gateways.
- Host scholarly content generate indigenously in digital format in open digital repositories.⁸

**1.18 Statement of the Problem**

The professional college students are generally expected to be the regular users of information technology and its services. The present study is an attempt to understand their information technology needs to assess the use of IT based information sources and services by the students. All most all the professional institution libraries are well equipped with IT information facilities and provide access to the students and faculty. Hence the research problem is stated as ‘Use of Information Technology among Postgraduate Professional Course Students in Rayalaseema Area, Andhra Pradesh: A Study. The terms used in the present research study are defined operationally.
Library

“Library is a social Institution charged with the enviable function of dispensing knowledge to the ignorant and the informer alike, mainly by collection, preservation and dissemination”.

Library as a resource centre to develop a comprehensive collection of documents useful for students, faculty and researchers of the institute and provide an efficient dissemination of knowledge.

College

An Institution offering courses in higher education especially one specializing in a particular field of learning.

According to Accurate and Reliable Online Dictionary “An institution of higher education created to educate and grant degrees; often a part of a university.”

Rayalaseema

Rayalaseema area is a geographical region in the state of Andhra Pradesh in India. It consists of the 4 districts, namely Kadapa, Kurnool, Anantapur and Chittoor. The great emperor of south India Sri Krishnadevaraya had ruled this area during the period of 16th century. He developed agriculture, constructed reservoirs and took steps to dig a number of tanks for rain water storage. He encouraged art, culture and literature during his regime. ‘Seema’ means a ‘region’ or a geographical area in a state. As this region was ruled by Sri Krishnadevaraya, it is popularly known as“Rayalaseema area”.

Rayalaseema is a geographic region in the state of Andhra Pradesh in India. It includes the districts of Anantapur, Chittoor, Y.S.R (Kadapa) and Kurnool. It has a total area of 67,299 km, which is 24.46% of total state area with a population of 15,174,908 (2011 census) and has 17.93% of population of integrated Andhra Pradesh state.

User

The user in relation to a library is gaining upper hand. It is the prime responsibility of the Librarian to satisfy the user of all his requirements. The word
“User” encompasses the whole gamut of those who pay a visit to the library. Users include students and faculty of professional colleges. However, in the present study the terms ‘users’ denotes the post-graduate students of professional colleges.

The present study intended to know the utilization of information technology in the professional colleges by the students especially in Rayalaseema region.

**Information**

Information has been viewed differently by different users. For some it is knowledge and for others it is commodity, power and for some it is a document.

Information is the knowledge, facts or data, which can be used, transformed or communicated. It is the result of an experience and observation. It is a collection or accumulation of statements of facts or figures which are exceptionally interrelated. An item of knowledge becomes an item of information when put in action.

**1.19. Information Needs**

User information needs forming part of the user study, aims at the details of the information seeking behaviour of the users, their reading habits, preference to different services and satisfaction in relation to the services offered.

The need for information is increasing day-by-day. Different types of users approach the library for different types of information. The information needed for various purpose is enumerated as:

1. Policy makers and Decision makers need information for taking right decisions.
2. Information generates new information i.e., the existing knowledge/information in generating new information and new knowledge.
3. Professionals like Doctors, Engineers, Scientists, and Scholars etc need latest information for their career development
4. Information is also needed to avoid duplication of research.
1.20. User Needs

The goal of a library is to assist users in satisfying their needs and requirements. The heart of library is its collection. The library is a growing organism as per S R Ranganathan’s fifth law of library science.

1.21. User Satisfaction

Dictionary meaning of “Satisfaction” is “Fulfillment” or “Gratification of a Desire, Need, or Appetite”.

Applegate defines user satisfaction as “User satisfaction/IT is a personal, emotional reaction to a library service or product”8.

Definition of satisfaction for English Language Learners: “a happy or pleased feeling because of something that you did or something that happened to you. The act of providing what is needed or desired: the act of satisfying a need or desire”9.

1.22. Need of the Study

Due to the developments in science and technology, the libraries are forced to use Information and Communication Technology (ICT). Libraries are procuring not only print documents but also electronic documents. They are providing ICT based services. A substantial amount is spent on electronic information sources and services.

It is necessary to know to what extent ICT is used by the users of professional colleges in Rayalaseema area of Andhra Pradesh. Hence a study has been undertaken to assess the use of Information technology among postgraduate professional course students in Rayalaseema area of Andhra Pradesh, so that necessary measures can be undertaken to maximize the use of information technology among the postgraduate professional course students.

1.23. Objectives of the Study

The following are the specific objectives of the study:

1. To know the purpose of Information Technology services using by Postgraduate Professional course students in the library.
2. To assess the suitable place to access the Internet services to the students.
3. To understand the Utilization of different Internet services by the students.
4. To identify the problems faced by Postgraduate students in accessing Information Technology services.
5. To examine the overall satisfaction of postgraduate students with IT based Information services.

1.24. Hypotheses of the Study

1. Majority of the respondents are using Information Technology services for their academic purpose.
2. Majority of the students are accessing the Internet services in their college library.
3. Majority of the respondents are using various services of Internet.
4. Majority of the respondents are facing problems in accessing the IT in their respective libraries.
5. Majority of the students are satisfied with Information Technology based services.

1.25. Methodology

The present study focuses on the availability of Information technology resources, services and their utilization in professional college libraries in Rayalaseema area.

1.25.1 Selection of Sample

Selection of sample is carried out at two levels namely college level and user level. The libraries of postgraduate professional colleges which are conducting M.Tech, MBA and MCA courses are known as postgraduate professional college libraries. There are 32 postgraduate professional college libraries in Rayalaseema area of Andhra Pradesh established on or before the year 2000. Rayalaseema area covers the districts of Anantapur, Kurnool, Y.S.R (Kadapa) and Chittoor. All 32 postgraduate colleges were taken for the study. The libraries which are attached to colleges are established in the year on 2000 before 2000 as sample for the present study.
The population of this study consists of postgraduate students of these college libraries. There are a total number of 4204 users registered in the college libraries. As the population is large in terms of cost, time and labour involved, the investigator selected a sample of 1655 users out of 4204 users as shown in table 1 using proportionate random sampling method.

### Table1: Users in population and sample

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Category of Professional College Libraries</th>
<th>Number of Professional College Libraries</th>
<th>Population</th>
<th>Sample</th>
<th>Percentage</th>
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<td>32.14</td>
</tr>
<tr>
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<td>MBA</td>
<td>10</td>
<td>1102</td>
<td>497</td>
<td>30.03</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>32</td>
<td>4204</td>
<td>1655</td>
<td>100</td>
</tr>
</tbody>
</table>

### 1.26. Design of the Questionnaire

Questionnaire was designed for users in English language in such a way that it can be easily understood by the respondents. A pilot study is conducted on 50 postgraduate students. With the opinions expressed by the respondents necessary alterations were made in the questionnaire, and the modified questionnaires will put to use in the collection of data.

### 1.27. Collection of Data

The data required for the study is collected from postgraduate students using questionnaire tool by visiting all the college libraries personally under the study. It enabled the investigator to observe and assess the existing conditions prevailing in those libraries. Documentary sources are also used to supplement the data. The data is collected during the period from 20-11-2014 to 30-6-2015.

### 1.28. Analysis and Presentation of Data

The data is analyzed and interpreted according to the objectives and hypotheses formulated. Descriptive statistics were used in the analysis of data. The data is presented in the form of tables, pie diagrams and bar diagrams.
bibliographic details of references cited in each chapter are given at the end of the chapter, following APA standard.

1.29. Limitation of the study

The study is limited to the users of libraries of 32 postgraduate professional colleges which were established on or before 2000 year.

1.30. Organization of the Thesis

- Chapter one deals with the Introduction wherein objectives, hypotheses of the study and Methodology are discussed.
- Chapter two deals with the review of literature pertaining to the topic of research.
- Chapter three deals with the Information Technology in professional college libraries.
- Chapter four is devoted to the analysis and interpretation of data, which has collected through questionnaire tool.
- Chapter five presents the summary and findings of the present study, with recommendations for the development of professional college libraries.
References:


7. ARORA (Jagadish) and others. National Library and Information Services Infrastructure for Scholarly Content (N-LIST), User Guide and Tutorials on E-resources Subscribed under the N-LIST Programme for Colleges, INFLIBNET Centre, Ahmedabad.2010.

