CHAPTER-III

Growth and Development of Professional Education in Southern Karnataka

“Education is the manifestation of the perfection already in man”

- Swami Vivekananda

3.0 Introduction

The journey from darkness to light can be sailed through the boat of education. Education is one of the necessities for the welfare of a nation. Education is a tool of empowerment which enables active participation from all the sections of the society, especially marginalized poor, to bring about a positive change in the society and nation at large. As Swami Vivekananda illustrates, Education brings about a change in a character of an individual and if the character of individuals is strong then it is the pedestal for the growth and prosperity of the nation. As Nelson Mandela rightly said that Education is the most powerful weapon which can be used to change the world, it is proven now in the world that those countries in which the people are well educated are now leaders in the world panorama. It is the main driver of economic growth and development.

3.1. Higher education in India

Education transforms people of a country from just being passive individuals to active citizens. Therefore, human resource development becomes a crucial factor in any nation’s growth story. And in that, higher education plays immense role in shaping the individuals and getting them ready for their next level of advancement.

3.1.1 Growth of higher education in India

India is a land of ancient civilization. From the ages of yore, education was given utmost importance. India gave the world, the Nalandas and the Takshashilas which were the greatest learning schools of that time. Indian culture from the very beginning encouraged the spirit of enquiry and the tradition of discussion and debates helped shape the education system of this land.
As a result, the loftiness of science and arts reached by this countrymen were unparalleled to any other nation in the world. Many of the scientific ideas and thoughts put forth by Indian scientists and rishis of the yore were so profound that they reached much of the Modern Europe and other nations just a few centuries ago. These can be said to be the fruits of a well-established higher education system in India. The systems remain untouched and uninfluenced despite the presence of diverse set of people with different religions, caste, color, creed, language and even culture.

The concept of Gurukuls, Pathashalas, Madarasas etc were very prevalent during pre-British era. During the British administration, we can trace the emphasis laid on the education by Lord Macaulay. Though the education system which was sought to be introduced by the British was to serve their own interests by educating the elites who could then be used control the masses, we can see that there is a growth of western education. Especially post the passing of the Regulating act of 1833, when missionaries were allowed to open up schools in India and in the middle of the 19th century, there seems to be a rapid development of schools, colleges and universities. The Bombay, Calcutta and Madras universities were established accordingly. Even the Indian National Movement highlighted the need for a good higher education. Despite the efforts by the Indian founding fathers, the level of education remained grossly inadequate by the dawn of independence.

Banaras Hindu University established by Madan Mohan Malviya, Aligarh University started by Syed Ahmad Khan in 1920, University of Mysore in 1916, University of Osmania in 1918 etc were a few examples.

By 1951, there was just one person per thousand in India, enrolled in higher educational institutions. Indian then consisted just over 20 universities and 500 colleges located in different parts of the country. The five year plans were grossly inadequate in meeting the demand of a huge populace. It started to become very evident to the leaders that the education system devised for the nation had the imprints of foreign rule and domination and that it was not meeting the needs and the goals of the country. This later lead to the establishment of many colleges with new and renewed nationalistic outlook.
Several Committees for the improvement of education system were set up. Noted ones were Sri Radhakrishnan Committee (1948-49), which laid out aims of university education, University Grants Commission (1956), which was required to determine and co-ordinate the set of standards and necessities of college education, The Kothari Commission (1964) to guide the government in laying the policies and principles for the improvement of Higher education. National Policy of Education came out in 1986, with key aims and objectives to be met by the education of present and the future. Likewise, from time to time, since independence, India has witnessed the evolution, diversification and expansion of higher education.

### 3.1.2 Higher education in Karnataka

Karnataka, in many ways represents the progressive side of India in terms of education. It would not be an overstatement to say that Karnataka, among other developed states of this country, is a hub of higher education with more than twenty universities and a huge number of undergraduate colleges.

University of Mysore and Karnatak University, Dharwad are amongst the oldest ones in the country. Karnataka also boosts of having a full-fledged Women University at Vijayapura catering women's education exclusively. With the aspirations of high quality, goal oriented, holistic education, Karnataka too has developed a Karnataka State Education Policy which integrates research and innovation in the academics.

### 3.2. Professional education

The skilled professions in medicine, management, law, teaching, engineering, architecture requires an efficient professional education as its base. In the human resource development process, though the primary education is quintessential as it creates the base, it is the higher professional education that provides the cutting edge to the developing economies.(National Knowledge Commission, 2006). It is the place where the wisdom and thinking of individuals are applied to the production processes thereby yielding a cutting edge technology or outcome.

The professional education is the most important stage which facilitates creating, preserving and transferring of skills/knowledge to and from different
generations, regions and nations which helps in achieving a prosperous life and strives to create a world of equals. (National Knowledge Commission, 2006).

3.2.1 Professional education: Meaning and its contours

Professional education has come about to be highly prestigious amongst societies. It is the value that the individuals impart to the society that makes it so admirable. From the very early days, the professions of Medicine, Law and Theology were considered highly specialized and were respected across the world. And, those who were trained and practicing these professions were highly appreciated and protected (Jarvis, 1983). Slowly, as societies evolved, many other professions such as architecture, journalism, forestry, music, librarianship, teaching got added to the list. It is the scholarship and specialization in different subjects and mastery over the skills in their relevant area that make up any professional and build their professions. Hence we can say, a professional education is a journey in which people can get equipped in their discipline to render a meaningful service to the society. It refers to the variant of higher education which imparts a special training and skills which gains admiration because it entails a high level of specialization and expertise and eventually employability and remunerations (Ghuman, Singh and Brar, 2009). On the contrary, the low skilled, poorly educated populace generally faces meagre prospects of leading a good and prosperous life (World Bank, 2000).

The higher education, of professional variety, alters the very attitude towards work by shouldering higher responsibilities and remuneration (Mathur, 2001) and this makes people more civilized. Hence, professional education is fundamental toward national growth. It absorbs poverty, enriches quality of life, encourages social mobility and enhances political participation and upholds democratic values. (World Bank, 1991, 2000).

In the recent years, different institutions have come up to impart the quality professional education. Professional education also includes vocational education and polytechnic training. It becomes extremely crucial that these professional education are established as per the norms and universal standards so that it is easier to certify the professionals. In India, we have different organizations which are involved in certifying these professional candidates, viz.

• Medical Council of India (MCI)
• Dental Council of India (DCI)
• Central Council of Homeopathy (CCH)
• Bar Council of India (BCI)
• Rehabilitation Council
• Indian Council for Agricultural Research (ICAR)
• Pharmacy Council of India (PCI)
• Indian Nursing Council (INC)
• Central Council for Indian Medicine (CCIM)
• Distance Education Council (DEC)
• National Council for Rural Institutes (NCRI)
• State Councils of Higher Education (SCHE)
• All India Council of Technical Education (AICTE)
• National Council for Teacher Education (NCTE)

3.3 Growth of engineering education in India

Science and Technology are bedrock of growth story of any civilization. Engineering marvels can be seen in Indian subcontinent at various places and they date all the way back to Harappan civilization. From the grand structures to the sophisticated astronomical instruments, Indians were pioneers in Science, Technology and Engineering.

The 18th century Industrial Revolution in Europe, particularly in England, gave rise to the modern development of Engineering. Though India missed this industrial revolution, the post-independence era saw the rise of intelligentsia which embraced the new technology like never before and now Indians are in the forefront in engineering crafts in the world.

During pre-independence era, there were efforts to lay the foundation for modern technical education. The survey school in Madras established in 1794, the Industrial school in 1842 at Chennai, The Thomas Civil Engineering school at Roorke in 1847, The Bengal Engineering college in 1856. The Jadavpur Engineering
college in 1908, The Indian Institute of Science in 1909, The Banaras Hindu University in 1917 etc are a few examples of the effort made in that direction.

Post-Independence, the birth of AICTE (All India Council for Technical Education) provided a new fillip to the growth of technical education in India. The Indian Institute of Technology (IITs) and National Institute of technology (NITs) colleges, were set up, which created a whole new paradigm of excellence in the field of engineering in India. AICTE ensures that there is uniformity in standard across the country to achieve excellence in the field of technical education. It is an advisory body for central and state governments to develop a systematic technical framework.

Karnataka was the first state which took an active role in establishing engineering colleges and universities in the country. It was the first to allow private engineering education colleges thereby opening up more avenues of learning.

The first engineering college was started in the year 1917 at Bangalore under the then visionary Mysore Administration. And since then there is an exponential growth of engineering and technical colleges owing to the humongous demand from the people. Students not only from Karnataka but from all corners of the country flock to these temples of learning, year after year, to gain admission to become future professionals.

As mentioned before, The All India Council for Technical Education (AICTE) established in 1987, governs these technical colleges and universities. Vishveshwaraya Technological University (VTU), named after Bharata Ratna Sri Sir M Vishveshwarya a great engineer from Karnataka, manages all engineering colleges in the state. It is recognized by University of Grants Commission (UGC). It strives to bring about the uniformity and standardization across all the engineering colleges of the state. In total it can be said that Karnataka has lot to give to the world in the field of technical education.

3.4. Growth of medical education in India

Medical Institutions are said to be the health keepers of the society. The profession is viewed with much reverence and admiration for the very reason that it pertains to life and death of human beings. It is application of health related science for the treatment and welfare of societies. Without good doctors, the longevity of
society and nation reduces. The advancement of medical profession is a prime reason for the increase in life expectancy of humans.

Western Medical Science came to India through the Portuguese. Medical help was primarily provided at the time of war for the troops injured during the battle. Later during the British era, organized services such as Indian Medical Service and the Central Medical Services and the Provincial Medical Services were started. The first medical institution was set up in 1822 in Calcutta to provide medical training in India. The course material was translated from English to native languages for students but that was later abolished due to lack of patronage. Gradually several other medical institutions were set up, in Calcutta, Bombay and Madras. In some parts of the country, during British era, the administration took up the activity of vaccination and public health measures by taking responsibility of sanitation and hygiene.

During the Nationalist movement phase, Ayurveda, the Indian Medical knowledge was sought to be revised. Ayurvedic practitioners formed an All India Ayurveda Congress. Hakims, practicing Unani system of Medicines and Ayurvedic doctors complemented each other often borrowing and learning from each other’s experiences. But due to the intrusion of western education, both the indigenous and western medicine clashed and often both were at logger heads with each other to prove their superiority. Western Medicine was portrayed as more modern than the age old knowledge of indigenous medical know-how and was looked down upon.

At the time of independence, India faced a different challenge on the health front. The repeated famines, the lack of proper health facilities, the low nutrition level in the people, lack of awareness regarding health and extreme poverty, had made the health indicators of the country worse. India had to look to make a great progress in the field of medicine and public health. And hence it was found necessary to engrave this principle of public health in Indian Constitution and likewise, Directive Principles of State Policy mentions that “the state shall regard the raising the level of nutrition and standard of living of its people and the improvement of public health as among its primary duties.”

But almost seven decades later, India faces quite a different challenge. There is no dearth of education institutions but commercialization of the field is posing a great danger. The mushrooming of colleges, arbitrary selection process, non-
meritorious candidates coming out as doctors, the lack of quality and standard education etc are a few problems plaguing this field. Several committees such as Shrivastav Committee in 1970s, Bajaj committee in 1986 etc were set up to look into the matter of improving medical education and accordingly changes have been made in the system.

In 1956, through the Indian Medical Council Act, Medical Council of India was set up. It is required to set up some minimum required standards in Medical education to grant qualifications in the field of medicine. It has several other functions such as setting up subjects of courses, deciding the duration of study, the staff, accommodation, apparatus standards, conducting examinations etc. It can also give its recommendation to the government of policy matters.

Despite all this, Medical education still has a lot of scope of improvement. There needs to be a shift in thought process from treatment to holistic wellness. Native medical sciences which are yet to be fully explored, needs fair and equal treatment along the lines of Western Medical practices.

The Karnataka Government in the year 1996 established Karnataka University of Health Sciences at Bengaluru which is now called Rajiv Gandhi University of Health Sciences to implement the national policies set out by the National Policy think tanks. It mainly sets up uniform curriculum, improve Medical Education standards across the state, conducts entrance tests for affiliated colleges etc.

3.5. Growth of legal education in India

The study of laws, on condition they are good laws, is unrivalled in its ability to improve students. – Plato (Plato (c.428 - 347 BC)

Legal education is generally viewed as education to lawyers before their entry into practice. Legal system of any country, in many ways is the conscience keeper of the society. The better and efficient legal system, the developed and happier a nation it becomes. In this light, legal education becomes a very important and a crucial branch. The legal profession is a noble calling and those who practice it occupy a very high status in society. (Iyer, 1989). For welfare states which are constantly trying to improve the services to its citizen by ameliorating the socio-economic conditions, it is
extremely important to have a very good legal framework and extremely effective legal education as those will have a significant impact on the country’s functioning.

Throughout history we find that different regions at different points of time had their own set of laws and officers were appointed with the background of legal knowledge to oversee different aspects related to law. Law has also taken a moral imperative and the proof can be found in Testament of 1280 BC. Later Romans developed law, which was influenced by Greeks. In India, it was Vedas, which are the original source of law. It was Smritikaras, the jurists of that time who had the authority on law (Sharma, 1984).

During Mughal era, it was the emperor who was the Chief Justice. Legal systems began to evolve as there was need to study religious laws and handle cases accordingly. Different religious scriptures were interpreted and accordingly judgments were pronounced.

It was during British period that main law courts were set up in first part of 18th century in Madras, Bombay and Culcutta. It also opened doors to the students of law by setting up universities and thus started a new chapter of formal legal education in India. The Regulating act of 1772 for the first time recognized the legal profession in the country. Post-independence, there was mushrooming of law colleges in India. But many of these were not upto the standards. Some of them lacked basic infrastructures and facilities such as proper buildings, teachers, library etc. (Report of the Committee on Law Reform in Legal Education,1980). As days progress, there is an enormous change in science and technology and as per the demands of the present day, legal education must also be molded accordingly.

In Karnataka, the first law college was started in the year 1939 at Belgaum by Karnataka Law Society (KLE), an association of prominent lawyers of that time. When the state was undergoing reorganization in 1956, there were just four law colleges with strength of 758 students. They initially awarded LLB (Bachelor) degree and later on started even with Masters in Law (LLM). In 1981-82, there came up about 32 colleges teaching law education in the state. Later Bar council of India decided to bring about a transformation in Legal education and enhanced the learning during to 5 years, thus bringing in uniformity across the state. Current state of affairs of Legal education is not so pleasant. The private management hand in the field has
created lackadaisical attitude towards providing quality education. Private players are given license and permission to start the colleges without even fulfilling the necessary conditions of existence of infrastructure and other facilities. State government must pitch in to ensure that the standards and guidelines set up Bar Council on India are adhered to.

In the year 2009, Karnataka Government established Karnataka State Law University (KSLU) to provide quality legal education in the state. It is aimed at transforming the legal education system prevalent in the state by adopting the Information and Technology tools. It conducts seminars, workshops, symposia and even has its own international law moot court competition.

3.6 Growth of teacher education in India

In Ancient India we do not find evidence of formal teacher training centres. The knowledge acquired through gurukuls, pathashalas etc was passed on to other people who later passed on to a few more. With the arrival of British in India, European missionaries began to start the formal teacher training institutions in the country (Singh, 2006). They started off with elementary education and later spread to secondary education too. In 1856, a teacher training institution was started at Madras. The woods dispatch of 1854 highlighted the need for teacher’s training. Later Hunter Commission in 1882 also recommended giving encouragement to schools employing trained teachers. Even in the 1913 Govt of India Declaration, the importance of training was reiterated. Later in 1929, Hartog committee too made a strong pitch for teacher training programs. Other reports such as Abbot Wood Report (1937), the Sergent Report(1944) too highlighted the need for this.(Janardan, 2005)

Post-independence too, this was carried forward and a great fillip was given by different commissions such as The University Education Commission (1948), The Secondary Education Commission (1953) etc. A national level policy was sought and there came a National Education Policy of 1968 and 1986 which treated teacher training at par with other divisions of education. But along with independence came chaos in this field too. There was a large number of schools to be set up to cater to large segments of population who had been hitherto not included in the education system and hence there was a pressing need to quickly add on more teachers to the system and this lead to the dilution of standards, lack of co-ordination amongst the
teaching centers, mediocrity etc. This also gave rise to commercialization of this field. Hence government decided to set up National Council For Teacher Education (NCTE) in 1973 to stop the commercialization of teacher training centers and to provide a kind of quality assurance to the field of education. It is an advisory body for state and central government regarding teacher’s training and education policies. NCTE has its secretariat in National Council of Education and Research and Training (NCERT) in its Department of Teacher Education.

NCTE has objective of overall co-ordinated development of the system of teacher education in India. It aims to maintain standards in teacher education, decide on facilities to be given to teacher’s educators, financial affairs of such colleges etc. It deals with varied levels of education starting from Pre-Primary Level to Senior Secondary Education, from Non-Formal to Distance education.

3.7. Role of Professional College Libraries

We have seen in the preceding section the role of higher education and professional education in particular, in dissemination of knowledge in society. The main source of knowledge in these temples of learning is in libraries. Libraries are store house of information and repository of all course related data. It is organized in a way so that anyone looking for information can easily get access to and retrieve from there. It also periodically maintains information which is of relevance to the college or university. In a nonprofessional institution, library acts as a facilitator to the students to help them inculcate the reading habit and develop interest in different subjects and to know different facets of life. While the professional libraries keep the information related to the subjects of profession along with those books of the general interest. As professional students need updated journals, periodicals etc, libraries are a great source of repository from which students can access those materials which otherwise would not have been possible individually. It is observed that the quality of education in a college or university greatly depends on the quality of library services offered by the institution.

3.8. Role of Engineering College Libraries

The Engineering educational institutions have been certified by the agencies like the International Organization for Standardization (ISO), or the National Board of Accreditation (NBA) of the All India Council of Technical Education (AICTE), or
both. In India, the independent accrediting agencies (NAAC, NBA) evaluate higher educational institutions based on their strengths in curricular aspects, teaching methodology, research facilities, infrastructure, and student-support mechanism. The NBA offers accreditation to the institutions offering courses in engineering, management, architecture, pharmacy, hotel management, and country planning. The Engineering educational institutions in Karnataka are keen in being accredited either by a national agency or by an international organization to exhibit quality and competition.

Libraries help in developing interest in learning and foster future career growth amongst readers. (Shivalingaiah, 1994). Engineering is a field of application of science, the art of making something productive so that it can be useful to the mankind. Engineering is an ever evolving area which contains enormous amount of information and also every day it keeps changing and updating. Hence engineering libraries have to be regularly kept abreast with all the new happenings in the world of technology. In engineering there are many fields and the intermingling of these fields produces a complex network of subjects. So these libraries must have generic basic engineering texts along with it should have collection of handbooks, encyclopedias and treatise on various branches of engineering.

Since the growth of information in engineering field is exponential, it is really an uphill task for the librarians to upkeep the information explosion and manages them in a very simple manner that can be easily accessed. Here the role of Information communication technology (ICT ) comes into play. The more the libraries use ICT, the easier it will be to organize the library. Engineering college libraries must be enhanced with high speed internet and other ICT Infrastructure to enable this transition from the old way of ledger maintaining library method. It therefore requires a trained and equipped engineering librarians who can bridge the gap between the students and the wealth of dispersed information.

3.9. Role of Medical and Dental College Libraries

Medical and Dental Colleges, as they are professional colleges require libraries which keeps variety of information on Medicine and health sciences. In the past the role of medical and dental libraries was just limited to storing and retrieving the information but over the time, this has changed. The libraries of this kind have
evolved as there is a humongous growth and availability of medical science literature, the rise of internet and e-formats.

These libraries can provide the undergrad students with basic subject knowledge while for the post graduate students it needs to give access to periodicals and research materials. Hence these libraries have to ensure that it provides the latest clinical and research knowledge recorded by the health care professionals. It is also important that Libraries have to upkeep information in several formats such as video, Audio, pictures etc. so that it is easier to the students to access the information the way they need.

It is mandated in Karnataka that every Medical and Dental college must have a library in conformance to the standards prescribed by bodies such as Medical Council of India and Dental Council of India. In Karnataka, Medical Libraries have exhaustive material on basic texts in UG colleges and Medical research and innovation literature and subscription to Journals, member to HELINET consortium and Medical and science magazines in PG colleges.

3.10. Role of law libraries

According to Moys (1982) “A law library is a collection of materials wholly or mainly containing legal information organized for use”. As society evolves the old rules will be rewritten. The laws and regulations of the yesteryear when not found in conformance with today’s standards will inevitably be displaced and a new law takes its place. As human beings evolve, human systems evolve and as human systems evolve, laws and rules evolve. Hence the information regarding the law keeps getting updated on a day to day basis. In that light, Law Libraries become repository of legal standpoint of a society at any given time and therefore it becomes very important that these libraries are kept updated with correct and latest information (Derham,1970). The outdated information needs to be purged and it has to be make way for the new updated information. A well-arranged library is a must for those in legal profession and those who are undergoing legal education. The library is like the tool kit for the lawyers and law students. They are indispensable part of their life. “The reason for law library is being different from another type of library in that they serve a profession which is literally unable to exercise its work without the use of the books. Lawyers are learnt to depend on them and use them in their own peculiar fashion.
This constant and inevitable use of books by lawyers has in its turn led to the production of law books of different format and arrangement from general books; it has also established its own special priorities of importance in the use of law books. The example, contrary to the prevailing general habit of reading or studying a particular book at a time, a lawyer whether they be attorneys, or academicians preferred to consult a large number of books simultaneously. The purpose of this technique is to scan tentatively relevant textual materials for lines of relevant judicial precedents or clusters of similar and related legislative powers with the utmost economy of time”.

3.11. Role of teacher education libraries

National Council of Teacher Education (NCTE), maintains standards of library for colleges to adhere to. It is required of these libraries to properly organize the books and subscribe to Academic magazines, multimedia, newspapers, etc. An academic library is at the centre of any educational institution. This type of library must strive to bring in the books or journals which describes the best practices in teaching and pedagogy from world over. The library must equip itself with materials which display the changing trends of education. No Teacher education college is complete with a good and strong library at its centre. It is the bridge between the teaching practice and its study. Most important part of these libraries are the models used during teaching. The libraries must procure and keep the best models, maps, prints, examples, manuscripts, recordings, which can be utilized by the teachers to learn to use these during the interaction with the students. It is also important to train the teachers for the usability for library services to scan through the available material and put it to use at their workplace. The status of these libraries in Karnataka is bleak. Not many have good resource materials and they lack financial support and skilled librarians.

3.12 Summary

Thus in this chapter, we tried to look at higher education in India and in particular we laid emphasis on Professional education & the manner in which the librarians therein are using ICT in college libraries. We briefly looked at the history and the present condition of Engineering, Medical, Law, and Education colleges. Professional colleges are the playing fields for the budding graduates. The
aim of the professional education is not just to train the students for a degree but to create individuals which specialty and expertise in the field in which they graduate from. And in this endeavor libraries and librarians have an important their role to play. With the technological advancements, there is no field which is untouched by the magic of ICT and librarians need can do a lot more to improve the present condition of libraries in south Karnataka. With huge literate population and enormous wealth of subject specific information, it is really a challenge for librarians to upkeep the libraries with the latest updated material. Hence professional college librarians need to up skill themselves as quickly as possible to embrace this new wave for better client satisfaction.
REFERENCES


http://www.vtu.ac.in (Retrieved November 01, 2016)