CHAPTER I

INTRODUCTION
1.1. HIGHER EDUCATION – AN INTRODUCTION:

Higher education is the backbone of any society and it is one of the most valuable national assets in any country. It is now not treated as luxury product and it is essential for national, social and economic development of a country. Higher education is a complex system facilitating teaching, research, extension and international cooperation and understanding.

In the era of knowledge-driven economy and learning societies, both formal and informal education are playing an increasingly vital role in promoting economic solidarity, social cohesion, individual growth, sustainable development and a culture of peace and world citizenship. Whereas views about the way to live learn, work and ‘think about work’ have changed the acquisition of knowledge and skills provided by a traditional formal educational setup do not correspond.

Quality of higher education decides the quality of human resources in a country. At the same time, achieving and sustaining quality standards in higher education is a tough challenge and there is a general criticism of deteriorating quality standards in higher education system all over the world.

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The core values of National Assessment and Accreditation Council (NAAC) for higher education system in India envisage national development, fostering global competitiveness including ethical values, use of technology and create an atmosphere and quest for excellence. Therefore, a new paradigm must evolve that is developmental, human-centered, environmentally sound and all inclusive, so as to prepare learners to be contributors to knowledge and not just mere recipients of knowledge. It has opened up new challenges and opportunities for higher education institutions – whether public, private.

In this context, it is relevant to look at the opportunities and challenges in the higher education system at the global level, national level and state level. The need to study the role of faculty members in enhancing the quality standards of the higher education institutions is also relevant and important.

1.2. HIGHER EDUCATION – GLOBAL SCENARIO:

The world is increasingly moving towards a knowledge economy, where industrial trade relations are being replaced by an intricate system of information exchange. Creation of new knowledge depends largely on education sector, particularly on the higher education and research development of the country. Higher education is now increasingly recognized as fueling economic activity, in order to gain economic returns.
Realizing the potential of higher education, several countries have made huge investments in the sector. Investment in Higher Education, particularly academic research has come to be recognized as a potential source that could aid a nation’s development through production of knowledge.

Solow (1957)\(^3\) stated that a nation’s productivity depends more on acquisition and application of knowledge through Research and Development rather than labour and capital. Agarwal (2006)\(^4\) also stated that there was a broad positive correlation between the Gross Enrolment Ratio (GER) in higher education and the per capita GDP of countries.

**USA:**

USA has the finest system of higher education in the world. It has set up a commission to examine the future of higher education in September 2005. The mandate of the commission is to ensure that America remains the world’s leader in higher education and innovation. For this purpose, the USA intends to make an investment of US $134 billion in higher education over the next ten years\(^5\).

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United Kingdom:

In UK, the higher education is primarily in the public sector. Faced with problems of deteriorating standards due to inadequate funding and failing accountability, a number of innovations in financing of higher education such as the performance-based funding for teaching and research and portable students’ aid, etc. were introduced during the last decade. This helped the UK higher education to regain its place as one of the best systems of higher education in the world. In a politically sensitive and a tough decision, the UK government has now allowed the universities to compete for students and charge variable fees, bringing an end to the regulated fee regime in the UK. This proves the point, “Competition ensures better quality standards and to the advantage of the public”.

After the general election of 2010, the Conservative – Liberal Democrat Coalition Government in Britain embarked on a radical new policy for the funding of higher education in Britain. The policy aims to transfer 80 per cent of the costs of teaching in universities to the students, and so effectively to privatize this aspect of university funding for all but the STEM (Science, Technology, Engineering and Mathematics) subjects. This is a remarkably radical policy with no precedent in Britain or in any other advanced Industrial countries.

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6 In January 2003 the Education and Skills Secretary in UK released the White Paper “The Future of Higher Education”, which sets out the Government’s plans for radical reform and investment in universities and higher education colleges. More information is available at http://www.dfes.gov.uk/egateway/heresform/index.cfm
Higher Education in the advanced industrial countries is funded largely by the state, although private universities are important, particularly in the United States. Public universities in the US have gradually been losing funding from their state governments. However, research continues to be generously supported by the federal government. This policy trend is also seen in the coalition government of Britain7.

Canada:

There is a long tradition of private career colleges in Canada. Today even the public universities are working very hard to pursue private links (Humphries, 20028). Their focus is on internationalization as a proactive response to the worldwide circulation of ideas, technology, capital, and people (Knight, 20039). There is a wide range of private post-secondary institutions working in Canada, offering programs in areas such as aviation, business, computer training, hospitality, tourism and English as second language, among others. While these institutions are required to register with the provincial government (being under the jurisdiction of the Canadian provinces), they are not accredited directly by the government. Rather, the institutions may be encouraged to apply for accreditation by the Private Post-Secondary Education Commissions in their respective provinces.

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Canada is the first country to have passed the Private Post-secondary Education Act in 1996 in order to protect the interests of students and their families as consumers.

**Australia:**

In 2003 in an integrated package for reforms in higher education, the government in Australia decided to increase the funding support for higher education and significantly enhance provision for subsidized loans and scholarships for students. The higher education reform package in Australia includes areas as diverse as teaching, workplace productivity, governance, student financing, research, cross-sectoral collaboration and quality (Commonwealth of Australia, 2003)\(^{10}\)

**Asia:**

In Asia, private institutions have always been a central part of higher education. Private higher education has been playing a major role in Japan, South Korea, Taiwan, Taipei, Indonesia, and the Philippines. In these countries, up to 80 per cent of students attend private institutions. Private higher education is reported to be rapidly growing in China, Vietnam, Cambodia, and other central Asian republics as well.

Generally, private post-secondary institutions are found to be at the lower end in terms of prestige, though there are some high quality private universities such as Waseda and Keio in Japan, De La Salle and the Ateneo de Manila in the Philippines, Yonsei in South Korea and Santa Dharma in Indonesia. These universities are among the oldest in their respective countries and share a reputation of training the elite class (Altbach, 2002). Several Asian countries already have considerable experience in managing private higher education institutions on a large scale, whereas other countries have picked this up during the last 25 to 30 years. Whereas there can be found a long tradition of private higher education in Asia, there can be found dramatic changes in terms of the public-private mix in Eastern Europe in the last few years.

- There are 91 private business schools in Poland, 29 in the Czech Republic, 21 in Armenia, 18 in Romania, and 4 in Bulgaria.
- In the Cote d'Ivoire, professional training is exclusively in the private domain, and in Gambia 44 per cent of skill-based education and training is privately provided.

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About 75 per cent of tertiary education in India is supposed to be under private management (Patrinos, 2002)\(^\text{12}\). Whereas most of the private colleges are affiliated with the open schools or public universities, and also find examples of new private universities being set up under the Private Universities Acts (PRUA) passed by some of the newly emergent states in India such as Chattisgarh or Uttaranchal.

**China:**

Reforms in higher education in China were initiated along with other economic reforms when China decided to become a market economy in the year 1978. Prior to that, higher education was in the public sector. There was no tuition fee. The government also took care of living expenses of the students. Since then, the system of higher education in China has radically changed.

The concept of cost-sharing and cost recovery was introduced in the early years of reforms. Tuition fees have now been made compulsory. The higher education institutions in China were expected to diversify their revenue sources and therefore they were allowed to have affiliated enterprises (Sanyal and Martin, 2006)\(^\text{13}\).


Higher education in China received an increased financial allocation from the government along with an increased support from alternative sources. With massive expansion in enrolment, the average funding per student was not allowed to be reduced. Through a national legislation in 2002, China proactively involved in the private sector to contribute and invest in higher education. That has paved way for a very rapid growth of higher education in China. With a view to nurture excellence, a selective approach in public funding was adopted.

In 1993, special financial allocations were provided for China’s top 100 institutions to upgrade them to international standards. In the year 1998, an even higher-level funding was provided to nine top universities to make them world class.

**Korea:**

Korean higher education has been rapidly growing during last six decades. This growth is seen both in the quality of education as well as in quantity. When Korea gained independence from Japan in 1945, its higher education was quite limited with only 7819 students enrolled in colleges (Lee 1989). By 2008, the tertiary enrollment rate was 98% which is the highest among the Organization for Economic Cooperation and Development (OECD) countries. This is related to Korea’s rapid economic growth since the 1960s.
Economic growth has provided a job market for college graduates and enabled the government to invest public funding in higher education which in turn has provided high quality human resources for economic growth. These cyclical chains of higher education – economic growth have been developed through strong governmental leadership\textsuperscript{14}.

**Vietnam:**

In Vietnam, about 12\% of the students attend “non-public institutions”. There the first non-public institution, known as the Thang Long University, was established in 1989 on an experimental basis. By 2002 - 2003, Vietnam had 23 non-public post-secondary institutions. Out of these, 16 were people-founded universities, 2 were people-founded colleges, 1 was a semi-public university and 4 were semi-public colleges.

- People-founded institutions are owned and managed by the NGOs or private associations,

- Semi-public institutions are owned and operated by the public authorities with some private support.

In future, private individuals may also own and operate non-public higher educational institutions along with some foreign-owned institutions (Ngoc Minh Le and Mark A. Ashwill, 2004)\textsuperscript{15}.


**Malaysia:**

In Malaysia there has been rapid growth of private higher education. There are 691 private colleges and universities and 4 foreign university campuses. Malaysia is one of a few countries that had long ago allowed private higher education, without granting it full status. Recently the government has put restrictions on funding study abroad programs. Instead it is striving hard to attract foreign students from neighboring countries by making Malaysia an educational hub. In fact, between 1997 and 2000, foreign enrollment grew by 60% in Malaysia\(^\text{16}\).

Malaysia relies on the private sector both to meet the excessive demand for higher education and technical skills and to generate revenues from abroad (Lee and Levy, 2003\(^\text{17}\)).

**Pakistan:**

Pakistan is going through tough and challenging economic, social, religious and political situations. On the economic front, Pakistan’s economy is in serious trouble and country has approached the International Monetary Fund (IMF) for assistance. Poverty is on the rise and prices of daily commodities including food and fuel are significantly high.

\(^{16}\) www.worldbank.org/edinvest

In domestic area one sector that got the particular focus and interest is the education sector of Pakistan. The importance of educated citizens that play a necessary and crucial role in the social, economic and political development of a society was revisited by Pakistani Government. It was again realized by Pakistani Government that education plays a vital role in producing conscientious, tolerant, accepting and accommodating citizens in addition to producing much-needed skilled labour force that Pakistan needs for its economic uplift.

Public higher education system, meaning not only the Pakistani universities but also the colleges that offer bachelors and master level degree programs are implementing reforms set forward by the Higher Education Commission since 2002. Pakistan’s higher education system serves many very important functions. These are the institutions that offer training and education to its young population and prepare them for future challenges. Further, the higher education institutions help the country in creating a skilled and knowledgeable human capital. Educated human resources are very crucial for Pakistan in not only developing its institutions and increasing its productivity but to compete with other nations in the region as well as globally.\(^\text{18}\)

\(^{18}\) Majid Khan, Saquib Yusaf Janjua, Malik Asghar Naeem, Farrukh Nawaz Kayani, CIIT, Islamabad, United States Agency for International Development's (USAID's) role in reforming Higher Education in Pakistan
Afghanistan:
In Afghanistan, along with political and economic changes, can find equivalent changes in the education sector. The Afghan government is actively planning for the first private university, the American University of Afghanistan. This university is to be American style, with English as the medium of instruction and mainly American professors as faculty. (Pasternak, 2004)

Saudi Arabia:
In Saudi Arabia, the government has given permission to private organizations to set up 2 new universities and 36 colleges as part of its privatization policy. The colleges are to be spread over the 9 cities and are to be in addition to 6 already existing private colleges with licenses from the Ministry of Higher Education (Pasternak, 2004)\(^\text{19}\).

Bangladesh:
In 2006, University Grants Commission of Bangladesh prepared a 20 year long strategic planning for higher education with the help of World Bank. Higher Education in Bangladesh was imparted through public institutions until 1990s which its supply situation was much slower.

In 1992, the Government of Bangladesh approved the Private University Act (PRUA) that encouraged the private entrepreneurs to establish private universities in Bangladesh. Currently there are 31 public universities and 51 private universities in Bangladesh\textsuperscript{20}. Conferring so much socio political powers to teacher, the students and other stakeholders, who have converted the public universities into a field of politics rather than producing professional and innovators as per the needs of country, can be blamed for deterioration of quality higher education in Bangladesh\textsuperscript{21}.

Interestingly, International organizations such as World Bank, United Organization for Economic Cooperation and Development (OECD), National Educational, Scientific and Cultural Organization (UNESCO), and European Union have taken efforts for strengthening the higher education and enhancing its quality standards.

\textsuperscript{20} Bangladesh Bureau of Education Information & Statistics, (2009) \textit{Bangladesh Education Statistics}.

1.3 INTERNATIONAL ORGANIZATIONS AND HIGHER EDUCATION:

Given the increasingly corporate culture in higher education, it is not surprising that ‘education’ has been included as a ‘service’ or a ‘commodity’ under the General Agreement on Trade and Tariffs (GATT) and World Trade Organization (WTO).

The UNESCO has been striving hard towards protecting and strengthening higher education as a common good at the global level by promoting pluralism and diversity, on the one hand, and equitable access, capacity building, and sharing of knowledge, on the other, the General Agreement on Trade in Services (GATS) and WTO are striving equally hard towards reducing the barriers to ‘trade’ in higher education. It is realized that though primary and secondary education is important, it is the quality and size of the higher education system that will differentiate a dynamic economy from a marginalized one in the global knowledge-based economy.

Technological changes and demographic divided provide India a unique opportunity to mobilize its human resources to become a leader in both the rapidly expanding sectors of services and highly skilled manufacturing. The higher education sector holds the key to harnessing the full potential of the nation’s most important resources i.e. the human resources. The need for change in this sector is therefore, crucial.
1.3.1. World Bank:

In 1994, World Bank published its first comprehensive policy on higher education, *Higher Education: The Lessons of Experience*, which recognized the significance of higher education for economic and social development.

Then it has published other notable reports informing higher education policy directions including a huge number of country specific reports, working papers and technical reports focused on higher education reform (Salmi et al. 2009).

World Bank conducts the following seven types of higher education activities:

- Produce policy reports
- Provide financial support (e.g. loans, funding initiatives)
- Collect and analyze data
- Offer policy advice
- Sponsor international / regional conferences and networks (e.g. South – South Networks)
- Supply technical support and
- Provide analytical assistance

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1.3.2. Organization for Economic Cooperation and Development (OECD):

The OECD’s interest in higher education started from the early 1960s, when human capital theory supported the contribution of education to economic development and there was a rapid expansion of higher education among the member states of OECD. During the 1970s, its agenda was “Access to Higher Education”. And it focused on “problems pertaining to scarce financial resources, consequences of massification, internal economies and improving the links between higher education and employment” (Hufner et al. 1997). OECD carries out the following seven types of higher education activities:

- Data collection (yearly published in Education at Glance)
- Data production through surveys
- Country and thematic reviews (focusing educational aspect and quality assurance methodology)
- Policy research reports
- Nonbinding guidelines (e.g. guidelines for quality provision in cross-border higher education)
- Foresight projects and
- International conferences and networks.

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1.3.3. United Nation Educational, Scientific and Cultural Organization (UNESCO)

Unlike World Bank and OECD, UNESCO has a more inclusive social agenda of higher education by emphasizing human rights and cultural diversity. However, UNESCO supports a higher education regulatory agenda by focusing on cross-border quality assurance that normalizes global markets (Hartmann 2010b). 

UNESCO’s higher education activities focused on member states’ national planning by sponsoring forums/conferences, collecting statistics and partnering with institutions.

In its first higher education policy paper, Change and Development in Higher Education, UNESCO declared itself as informing higher education policy by supplying data, analyses and monitoring trends (Mundy and Madden 2009).

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UNESCO conducts the following seven types of higher education activities:

- Data collection
- Standard setting, through its regional conventions
- Policy research reports
- Nonbinding guidelines (e.g. Recommendation concerning the Status of Higher Education Teaching Personnel, 1997)
- Foresight projects
- Technical assistance
- International conferences and networks

1.3.4. **European Union (EU)**

EU had a number of higher education activities. The European Community Action Scheme for the Mobility of University Studies (ERASMUS) programme launched to focus on credit transfer and university networking and the Socrates program was developed to construct a wider range of interuniversity cooperation programmes. Furthermore, the Trans-European Mobility Scheme for University Studies (TEMPUS) programme was established in 1990 to support the eventual eastward enlargement of the EU (Keeling 2006).
The EU leads the following six types of higher education activities (Balzer and Martens 2004):

- Data collection and analysis (through comparative reviews, national reviews and evaluation)
- Policy proposals (e.g. focused on comparable degrees and credit transfer)
- Funding initiatives (e.g. ERASMUS, TEMPUS, Asia-Link)
- Technical assistance
- Coordination of policy implementation (e.g. Open Method of Coordination)
- Conferencing and networking support

Thus, conscious efforts were taken by the International Organizations to improve the quality standards of higher education and they have elaborated the pro-active role to be played by the respective governments and more specifically the knowledge transfer, collaboration between countries and to study the cross cultural factors. Now, it is relevant to look at the Indian Scenario in Higher Education.

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1.4. CHRONOLOGICAL EVOLUTION OF HIGHER EDUCATION IN INDIA\textsuperscript{28}:

Independence era:

The weight of colonialism hung heavily on the higher education system as well as the economy. The higher education system was manifestly an area of desertion and forsaking. In tandem, the economy was predominantly agrarian; the industrial sector was limited to areas that were directly linked to natural resources such as mining.

Post independence:

The decade post independence was characterized by Nehru’s strong socialist leanings coming perhaps from the strong sway of the Soviet Union. The guiding idea was to promote industrialization through central planning. The state invested heavily in higher education in techno-engineering.

The rewards of this investment did not come right away as it took years for Higher Education Institutions (HEI) like the Indian Institute of Technologies (IITs) to build capacity and generate the expected outcome of highly specialized workforce. Nonetheless, the seeds were sowed and the significance of specialized technical training was driven home. The state investment in higher education was matched by investment in Public Sector Units (PSUs).

\textsuperscript{28} http://ssrn.com/abstract=2139894
The ‘70s and ‘80s were marked by heavy-handed socio-democratic policy which was characteristically protectionist. There wasn’t much to write home about on the higher education front. Unlike the preceding era, higher education was not an area of priority, and the state investments were not as impressive as the Nehruvian period. In this, India did not align itself with the Asian Tigers, the stronger economies of Eastern Asian and South East Asian countries which took deliberate steps to integrate with the West.

As a result of the above mentioned distancing from the globalization, the country suffered economic downfall that was not short of a crisis situation. The writing on the wall was loud and clear: “Globalize or Perish”. The tendency of being insular ran parallel in the higher education realm too. While countries like Brazil, Japan, UK and US moved away from liberal education in favor of technical and professional education earlier on, India rose to the possibilities far later.
1.5. **HIGHER EDUCATION SYSTEM IN INDIA:**

Higher Education, in terms of relevance and importance, enjoys a significant position in the education system as it equips people with appropriate knowledge and skills to be gainfully employed. India has one of the largest systems of higher education in the world offering facility of education and training in almost all aspects of human creativity and intellectual endeavor. In the context of current demographic structure of India where the majority of population is below the age of 25 years, the role of higher education is critical. Higher Education in India has witnessed an impressive growth over the years. The number of higher educational institutions has increased from about 30 universities and 695 colleges in 1950-51 to about 700 universities (2012-13) and 35000 colleges, (As of 2011-12) as per UGC 2012-13 reports. With an annual enrollment of above 25 million, India is today ranked as the third largest higher education system in the world after US and China.

The number of Higher Educational Institutions in India shows that the share of state universities is the highest, i.e. 44 per cent followed by private universities i.e. 22 per cent, deemed universities i.e. 18 per cent, institutes of national importance i.e. 10 per cent and central universities i.e. 6 per cent. The total enrolment in higher education has increased from 0.21 million in 1950 – 51 to about 22 million in 2011-12, while the GER has increased from 0.40 per cent in 1950 – 51 and 19.4 percent in 2012-13.
The Former Prime Minister, Dr. Manmohan Singh (2005) has optimistically forecast that the 21st Century will be the “knowledge century”, by which he refers to the socio-economic transformation that the country is projected to go through in the 21st century as a result of knowledge creation. He also affirmed that “the time has come to create a second wave of institution building and of excellence in the field of education, research and capacity building so that we are better prepared for the 21st century. With the singular purpose of modeling recommendations and means to tap into this reservoir, the Government of India founded the National Knowledge Commission (NKC) in 2005.

Powar (2012) states that in the year 2007-08, humanities/social sciences accounted for 45% of the student population, engineering and technology only 7% and medicine a meager 3%.29

Mattoo (2009) explicates that “The whole idea of building a knowledge society is the idea of empowering young men and women through education and ensuring that all our deliver systems are built on the premise of the latest knowledge”30

29 Powar, K. B. (2012). Expanding domains in Indian higher education. New Delhi: Association of Indian Universities

1.6. GROWTH OF HIGHER EDUCATION IN INDIA:

The system of higher education in India is third largest in the world. The system of education in India inherited a poor educational infrastructure from the colonial masters. The colonial policy focused neither on mass education nor on higher education.

As a consequence, the country had to begin from scratch soon after its Independence. In order to meet the requirements of professional and technical manpower in a developing economy, the government set up the Indian Institutes of Technology (IIT), regional engineering colleges, medical colleges, arts and science colleges and universities. However, to begin with, there were only 20 universities and 500 colleges at the time of Independence. In 1990-91, there were only 179 university level research institutions which grew to 511 in 2006-07. During the same period, the colleges grew from 4,152 to 19,812 in the country (see Table 1).

The growth of the colleges during this period was high at 7.16 percent per annum compared to 4.58 percent at the university level. Tamil Nadu, the second industrialized state after Maharashtra, has registered a higher growth rate both at university level and also at college level than at the national level (see Table 1).
Table 1 - Growth of Higher education institutions and Enrolment in India and Tamil Nadu:

<table>
<thead>
<tr>
<th>Years</th>
<th>India</th>
<th></th>
<th>Tamil Nadu</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Univ. &amp; R. Instns</td>
<td>Colleges</td>
<td>HEIs</td>
<td>Enrol*</td>
</tr>
<tr>
<td>1980-81</td>
<td>179</td>
<td>4152</td>
<td>4358</td>
<td>2.76</td>
</tr>
<tr>
<td>1985-86</td>
<td>198</td>
<td>5232</td>
<td>5043</td>
<td>3.83</td>
</tr>
<tr>
<td>1990-91</td>
<td>233</td>
<td>6627</td>
<td>6289</td>
<td>5.03</td>
</tr>
<tr>
<td>1995-96</td>
<td>290</td>
<td>9033</td>
<td>8247</td>
<td>6.38</td>
</tr>
<tr>
<td>2000-01</td>
<td>331</td>
<td>11304</td>
<td>10515</td>
<td>10.00</td>
</tr>
<tr>
<td>2001-02</td>
<td>351</td>
<td>14232</td>
<td>11497</td>
<td>9.74</td>
</tr>
<tr>
<td>2002-03</td>
<td>385</td>
<td>14913</td>
<td>12161</td>
<td>10.01</td>
</tr>
<tr>
<td>2003-04</td>
<td>389</td>
<td>15274</td>
<td>10716</td>
<td>10.23</td>
</tr>
<tr>
<td>2004-05</td>
<td>443</td>
<td>16009</td>
<td>16452</td>
<td>11.77</td>
</tr>
<tr>
<td>2005-06</td>
<td>490</td>
<td>19495</td>
<td>20769</td>
<td>14.32</td>
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<tr>
<td>2006-07</td>
<td>511</td>
<td>19812</td>
<td>21108</td>
<td>15.55</td>
</tr>
<tr>
<td>Growth rates</td>
<td>4.58</td>
<td>7.16</td>
<td>7.23</td>
<td>7.44</td>
</tr>
</tbody>
</table>

Note: *enrolment in millions: Growth rate (in %) are estimated by fitting a semi log liner trend regressions from 1990-91 to 2003-04.

In the next few decades, India is speculated to have the world’s largest set of young people. While the correlation between higher education and nation building is indisputable, the working age population can be an asset only if their potential employability is brought to fruition.

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31 Selected Educational Statistics, various issues
India is being projected as a would-be super-power by the year 2020; at the same time, higher education, which is growing at the rate of 20% per annum worldwide, is being counted as one of the most important ingredients in knowledge-based economies. India therefore faces a big challenge in achieving its goals in this respect.

Private initiatives in higher education are not only feasible, but also desirable, if India is to meet the target of 20% of its youth in the age group of 17-23, as against 7.2% today. The government has not been able to attain the desired level of literacy during the last 60 years.

At the time of independence, the literacy level was just 14%; India’s target is a 100% literacy rate by 2020. At present there are 300 million adult illiterates in India and only 60 million out of 170 million children at the primary school level are able to make to secondary education. Out of these 160 million, only 9 million make it to post-secondary education⁴².

⁴² www.educationworldonline.net
As per MHRD Annual Report 2011-12 report

<table>
<thead>
<tr>
<th>No. of Institutions / enrolment</th>
<th>Year (2010–11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities</td>
<td>523</td>
</tr>
<tr>
<td>Colleges</td>
<td>33023</td>
</tr>
<tr>
<td>AICTE Technical Institutions</td>
<td>11809</td>
</tr>
<tr>
<td>Distance teaching universities / institutions</td>
<td>200</td>
</tr>
<tr>
<td>Enrolment in Universities and Colleges (in lakhs)</td>
<td>169.75</td>
</tr>
<tr>
<td>Enrolment in Open Distance Learning (in lakhs)</td>
<td>37.45</td>
</tr>
<tr>
<td>Enrolment in post sec./ post grad diploma (in lakhs)</td>
<td>18.56</td>
</tr>
<tr>
<td>AICTE approved technical programs</td>
<td>10364</td>
</tr>
<tr>
<td>Intake in AICTE approved technical programs (in lakhs)</td>
<td>26.15</td>
</tr>
</tbody>
</table>

- The number of higher education institutions in India has seen more than 50 fold growth in the last six and half decades.

- The GER figure is 16% for the year 2010-11 (MHRD 2011). Further, it is inequitably distributed across gender, socio-economic and the rural-urban divide.

- The considerable majority of higher education institutions in the vocational and professional sphere are privately owned and managed.

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Annual Report (MHRD) 2011-12
India boasts one of the most daunting distance education systems in the world – 14 open universities and 120 distance education institutions.

It is stated to be the most populous country by 2030. More relevant to the discussion at hand is the fact that more than half its population is younger than 25.

In spite of the fact that the vast majority of the population falls in the workforce bracket, the skill level of the man power is inadequate, resulting in markedly low productivity.

Pivotal to the discussion is the paradox that a significantly large number of graduates are unemployed or under-employed along with an acute shortage of skilled workers in the knowledge-intensive industry.

Paucity of skill intensive education is compounded by a parallel dearth of soft-skills. The outcome is workforce that is far from globally competitive. This was acknowledged and addressed by the Government’s eleventh five year plan.
1.7. **HIGHER EDUCATION IN INDIA – CRITICAL ISSUES:**

Higher education in India suffers from several systemic deficiencies\textsuperscript{34}. These are:

- It continues to provide graduates who are unemployable despite emerging shortages of skilled manpower in an increasing number of sectors.

- The standards of academic research are low and declining.

- Some of the problems of the Indian higher education such as unwieldy affiliating system, inflexible academic structure, uneven capacity across various subjects, eroding autonomy of academic institutions and the low level of public funding are well known.

- Many other concerns relating to the dysfunctional regulatory environment, the accreditation system that has low coverage and no consequences, absence of incentives for performing well and the unjust public funding policies are not well recognized.

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At the same time, the gains to be derived from overcoming these problems and from seizing the opportunities of economic and technological development are shown by a recent World Bank study\textsuperscript{35} to be tremendous:

- The time is very opportune for India to make its transition to the knowledge economy, an economy that creates, disseminates and uses knowledge to enhance its growth and development.

- Tertiary education is critical for the construction of knowledge economies. India currently produces a solid core of knowledge workers in tertiary and scientific and technical education, although the country needs to do more to create a larger cadre of educated and agile workers who can adapt and use knowledge.

- Measures are also needed to enhance the quality and relevance of higher education so that the education system is more demand driven quality conscious and forward looking, especially to retain highly qualified people and meet the new and emerging needs of the economy.

Former Prime Minister, Manmohan Singh, severely criticized in a recent speech the serious qualitative deficiencies in Indian higher education while at the same time announcing plans for a major expansion of the system. Reflecting on the findings of a confidential report by the National Assessment and Accreditation Council (NAAC), which is affiliated to the University Grants Commission (UGC), he expressed his concern over the fact that two thirds (68%) of the country’s universities and 90 percent of its colleges are “of middling or poor quality” and that well over half of the faculty in India’s colleges do not have the appropriate degree qualifications. At the same time, the Prime Minister expressed concern over the fact that only 7 per cent of India’s 18 to 24 year olds enter higher education (compared to 21 per cent in Germany, and 34 percent in the US), announced plans for the government to set up at least one “Central University” in each of the 16 (of India’s 28) states that do not currently have one, and at least one degree-granting college in each of the 350 (of 604) districts that are without one.

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36 Chronicle of Higher Education (CHE), July 6, 2007, A38; on the basis of a summary of several studies, a recent analysis concludes that “the overall state of Indian higher education is dismal and therefore poses a severe constraint on the supply of qualified manpower” (Agarwal 2006, ii). It should be pointed out, however, that problems of quality are by no means limited to higher education; a ILO-sponsored study of India’s Industrial Training Institutes (ITIs) in three Indian states (Orissa, Andhra Pradesh and Maharashtra), for example, revealed serious deficits in both their internal and their external efficiency (ILO 2003).

37 OECD, Education at a Glance 2006. Paris: OECD, 2006, Table A.3.1 (some care is advised in the comparison of these statistics, as they are gathered differently in different countries). Agarwal (2005, Table A5, p. 158) has compared, on the basis of Unesco data, “gross enrolment ratios” (the ratio of total enrolment in higher education to the population of the appropriate age group (17/18 to 23/24 years); on that measure, in 2002-2003, India has a ratio of 12 percent, compared to 16 for China, 51 for Germany, and 83 percent for the US
The “central universities” are to become “a symbol of excellence, a model of efficiency and an example in terms of academic standards and university governance for other state universities to emulate”\(^{38}\). While these plans are considerably more modest than what the National Knowledge Commission (NKC) has proposed (it foresees an expansion of the university system alone from the existing 350 to a future total of 1,500 institutions, including 50 “national universities” as centers of excellence\(^{39}\)), the added cost to the government of the former Prime Minister’s expansion plans already is estimated at around $13 billion\(^{40}\). Knowledge Commission concludes: “In sum, the existing regulatory framework constrains the supply of good institutions, excessively regulates existing institutions in the wrong places and is not conducive to innovation or creativity in higher education.\(^{41}\)” Pratap Bhanu Mehta, President of the Centre for Policy Research, concurs: “Our regulation is faulty, because it contemplates very little place for diversity of experiments.\(^{42}\)”

\(^{38}\) *Chronicle of Higher Education*, various issues (cited as CHE) (http://chronicle.com/)


\(^{40}\) CHE, June 15, 2007 (Volume 53, Issue 41, Page A40); total government expenditure on higher education (UGC, central government, state government) in 2005 has been calculated as amounting to 186,100 Rs. crores or approximately $45 billion (Agarwal 2006, Table A8, p.159; cf. Kapur and Mehta 2004, 4-5 and Tilak 2004, 2160).

\(^{41}\) NKC 2007, 54; see also Khemani and Narayan 2006, 4; Kapur and Mehta 2004, passim; Agarwal 2006, 76-102; Kaul 2006, 31ff.

It is not surprising that one of the key recommendations of the National Knowledge Commission (NKC), right behind the expansion of the system, is to change the system of regulation for higher education, claiming that “the system, as a whole, is over-regulated but under governed” and proposing to establish an “Independent Regulatory Authority for Higher Education (IRAHE)” that is to operate “at an arm’s length from the Government and independent of all stakeholders”\textsuperscript{43}.

A particularly interesting part of the debate on this issue centers around the need for new forms of governance in Indian higher education, where the focus would be on the twin postulates of Autonomy and Accountability\textsuperscript{44}.

An important step was taken in this regard by the Central Advisory Board of Education (CABE) which set up a special committee to design ways for promoting both autonomy and accountability in Indian higher education. The Committee has come up with a wide range of recommendations in 2005\textsuperscript{45};

\textsuperscript{43} NKC 2007, 43.

\textsuperscript{44} NKC 2007, 51; cf. Khemani and Narayan 2006, 18.

1.8. HIGHER EDUCATION IN TAMIL NADU:

“Without a body of sufficiently skilled and balanced workforce, no economy can hope to develop to its potential. Vision 2023, under its Education and Skills mission, aims to establish a robust human resources pipeline”.

Hon’ble Chief Minister of Tamil Nadu, Vision Tamil Nadu 2023

Knowledge is the key resource for global competitiveness. The processes of Liberalization, Privatization and Globalization (LPG) along with technological revolution have further strengthened the significance of a knowledge-based society. Globalization and Education are mutually supportive. It is a two way process, as globalization presupposes competitiveness and efficiency in the system and efficiency, in turn, is achieved upon the latest technology or knowledge accessible to the system. The entire process of globalization is technology-driven and knowledge-driven. In order to realize India’s aspirations to become a Knowledge Superpower by 2010 and a Developed Nation by 2020, the country requires highly specialized human capital to create, share, use and manage knowledge. It presents both an opportunity – demographic dividend of its youth, especially in the 18-25 age groups and the challenge of channelizing them through the present confusing to chaotic situation of higher education in India.
Higher Education Scenario in the Southern States of India had scaled new heights. In all spheres of education, the knowledge par excellence being imparted, has encompassed not only generic degrees but also vocational and technical education. Several government initiatives, public-private partnerships and industry-institution collaborations have proved to be an icing on the cake. With the escalation in educational achievements, Digital Learning magazine brings to you such initiatives and achievements, impact and challenges of higher education with specific focus on Southern Indian States.

Higher education equips the student with requisite skills for furthering their career growth. Some of the selected education best practices in Karnataka, Kerala, Andhra Pradesh and Tamil Nadu have been highlighted that have the potential of being replicated all over the country.

The growth of enrolment in Higher Education has been 7.44 per cent per annum at the all India level, while it was 11.34 percent in Tamil Nadu. However, the bulk of higher education enrolment around half of the enrolled students are in general arts and science colleges with another 18 percent in engineering and 13 percent in medical courses (Chart 1). It is important to note this lower distribution compared to the general arts and science colleges as most “private investment” in higher education is concentrated in engineering, medicine and management.
In order to attain the threshold levels of gross enrolment ratio in higher education, there need to be a concomitant qualitative expansion not only in higher education but also in school education. But what is happening is a sheer quantitative expansion of private unaided sector. The policy changes paved the way for expanding self-financing or the private unaided sector. Further, state funding was highly inadequate with just 3.5 percent of its GDP invested on education. With the combined forces of macro-economic reform policies, LPG and the rise in social demand, the private sector and also the ‘private’ aspect of higher education has been growing.

Traditionally, Tamil Nadu has held a preeminent position in a number of fields of basic sciences, mathematics, literature and economic sciences. The scientific contribution of the academics and researchers from Tamil Nadu has received worldwide appreciation.
Considering the scenario of higher education in the State, it can be established that the educational activities have increased manifold over the last few years. Major cities including Chennai, Coimbatore, Trichy and Madurai have established themselves as forerunners in the field of higher education.

Tamil Nadu has the second largest intake capacity in the country in engineering and polytechnic education. The intake capacity of engineering colleges has reached the level of 35,230 and that of the polytechnics has reached 47,500 educational institutions including: Indian Institute of Technology-Chennai, Madras Institute of Technology, Anna University, Christian Medical College-Vellore, Annamalai University, IT-Trichy.

There are certain factors that make Tamil Nadu a preferred destination for higher education. It has adequate educational institutions, efficient and committed teachers, strong education policy of the government and infrastructural facilitates for professional education. The participation of central and state-run universities in the educational movement is worth voting. The varsities have set guidelines for various purposes including diverse academic teaching, admission and infrastructural development.
The policy of the Government is to consolidate this capacity and improve the quality of the output from these institutions rather than increasing the number of new institutions. For this purpose, the Government has initiated programmes for upgradation of the engineering curriculum and syllabi at frequent intervals in order to capture the new developments in the technologies of the market place. The recent trend of declining quality of arts and science education has been taken into account by the government. Many of the postgraduate programmes in arts and sciences, even in prestigious institutions have failed to attract the brightest students. Recognizing this trend, the Tamil Nadu Government has undertaken special initiatives to maintain its leading role in the field of arts and sciences in the coming years. For this purpose, special attention has been devoted to revamp and restructure the postgraduate arts and science programmes in the colleges and universities of Tamil Nadu.

Higher Education for the Underprivileged, The Sowbhagya Higher Education programme in Chennai District supports students from the underprivileged sections who have progressed to higher education such as college or a diploma programme. This initiative was introduced in 2003 by Asha-Silicon Valley’s Support, A Child programme. In 2003, there were 5 students pursuing college education in fields such as Information Technology and Commerce. Today, the number has increased several folds.
Higher education in India and the educationally advanced state of Tamil Nadu needs to be viewed in this fast changing global context. Indeed, the Government of Tamil Nadu devotes special attention to strengthen the higher education system in the state and to respond to the emerging demands of the new century (GoTN, 2006a).46

The Government of Tamil Nadu is committed to a range of objectives, including economic growth, distributional goals, social inclusion, etc. Higher education is directly relevant to all these, besides the pursuit of knowledge for its own sake.

For higher education, these imply that in order to support growth, the sector needs to be large enough, of high quality, and responsive to a rapidly changing environment. In addition, to support distributional objectives, the needs of the weaker sections of the society including women, rural population, socially and economically backward communities are to be taken care of (GoTN, 2006a).

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1.9. **ROLE OF HIGHER EDUCATION IN THE SOCIETY:**

Higher Education is generally understood to cover teaching, research and extension. Higher education is the source in all walks of life and therefore supplies the much-needed human resources in management, planning, design, teaching and research.

Scientific and technological advancement and economic growth of a country are as depended on the higher education system as they are on the working class. Higher education also provides opportunities for life-long learning, allowing people to upgrade their knowledge and skills from time to time based on the societal needs.

The Kothari Commission (1955) listed the following roles of the higher education institutions in the modern society:

- To seek and cultivate new knowledge, to engage vigorously and fearlessly in the pursuit of truth, and to interpret old knowledge and beliefs in the light of new needs and discoveries;

- To provide the right kind of leadership in all walks of life, to identify gifted youth and help them develop their potential to the full by cultivating physical fitness, developing the powers of the mind and cultivating right interests, attitudes and moral and intellectual values;
• To provide the society with competent men and women training in agriculture, arts, medicine, science and technology and various other professions, who will also be cultivated individuals, imbibered with a sense of social purpose;

• To strive to promote quality and social justice, and to reduce social and cultural differences through diffusion of education; and

• To foster in the teachers and students and through them in the society generally, the attitudes and values needed for developing the ‘good life’ in individuals and society (GoI, 1966, p/ 497-8)

1.10. ROLE OF FACULTY MEMBERS IN HIGHER EDUCATION:

Higher education institutions such as universities, colleges and polytechnics, are labour intensive organizations. They depend on people for the delivery of their services. The quality of the staff in institutions of tertiary education is thus central to their effectiveness, in the same way that it is to all people centered organizations.

"A high-quality and well-motivated teaching staff and a supportive professional culture are essential in building excellence." (page 38.)

World Bank stated in its paper "Higher Education: the Lessons of Experience"
UNESCO stated in its policy paper entitled "Strategies for Change and Development in Higher Education", "Quality, which is not a novel concern in higher education, has, however, become crucial in present policy debate concerning the development and reform of higher education." (page 14.)

The Organization for Economic Cooperation Development (OECD, 2008) review on tertiary education asserts that, “Education policy is increasingly important on national agendas”. The widespread recognition that higher education is a major driver of economic competitiveness in an increasingly knowledge-driven global economy has made high-quality tertiary education more important than ever before. The imperative for countries is to raise higher-level employment skills, to sustain a globally competitive research base and to improve knowledge dissemination to the benefit of society.

Higher education imparts in-depth knowledge and understanding so as to advance the students to new frontiers of knowledge in different subject domains. It is about knowing more and more about less and less. It develops the student’s ability to question and seek truth and makes the student competent to critique on contemporary issues. It broadens the intellectual powers of the individual within a narrow specialization, but also gives the student a wider perspective of the world around.
According to Ronald Barnett (1992), there are four predominant concepts of higher education:

- **Higher education as the production of qualified human resources:** In this aspect, Higher Education is viewed as a process and the students are absorbed in the labour market. Thus, higher education becomes input to the growth and development of business and industry.

- **Higher education as training for a research career:** In this aspect, Higher Education is preparation of qualified scientists and researchers who develop the frontiers of knowledge.

- **Higher Education as the efficient management of teaching provision.** Higher education Institutions focus on efficient management of teaching – learning provisions by improving the quality of teaching, enabling a higher completion rate among the students.

- **Higher Education as a matter of extending life chances:** In this aspect, Higher education is seen as an opportunity to participate in the development process of the individual through a flexible, continuing education mode.
Higher education contributes to social and economic development through four major missions:

a. The formation of human capital (primarily through teaching);

b. The building of knowledge bases (primarily through research and knowledge development);

c. The dissemination and use of knowledge (primarily through interactions with knowledge users); and

d. The maintenance of knowledge (inter-generational storage and transmission of knowledge).”

In some academic fields it is said that the total of human knowledge is doubling every five or ten years. It is thus almost impossible for an individual staff member to remain in touch with the subject without a conscious investment in scholarship and self-tuition. When these knowledge advances are allied to similar changes in pedagogy, learning materials development and the use of technology, the scale of self improvement required becomes massive.
A model teaching staff member would have the following competencies:

- Awareness and understanding of the different ways in which students learn;
- Knowledge, skills and attitudes relating to assessment and evaluation of students, in order to help students learn;
- Commitment to scholarship in the discipline, maintaining professional standards and knowledge of current developments;
- Awareness of Information and Technology (IT) applications to the discipline, both as regards access to materials and resources worldwide and as regards teaching technology;
- Sensitivity to external "market" signals as regards the needs of those likely to employ graduates of the discipline;
- Mastery of new developments in teaching and learning, including an awareness of the requirements of "dual mode" tuition with face to face and distance learning using similar materials;

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• Customer awareness, as regards the views and aspirations of stakeholders, including students;

• Understanding of the impact that international and multi-cultural factors would have on the curricula;

• Ability to teach a diverse range of students, from different age groups, socio-economic backgrounds, races etc, throughout a longer day;

• Skills in handling larger numbers of students in formal lectures, seminars or workshops than hitherto, without the loss of quality;

• Development of personal and professional "coping strategies".

It is essential that a response to the challenge is integrated and holistic. In the words of Mukherjee and Singh (1994) "there must be a total comprehensive approach where academic, management, administrative and technical support staff development are viewed as a whole within a facilitating infrastructure".
1.11. THE CURRENT STATUS OF TEACHERS IN THE HIGHER EDUCATION SYSTEM:

The teacher is perceived as a role model by the students both consciously and unconsciously. The teacher is able to make an impact on the students while acquiring knowledge and skill as well as attitude which are relevant to his / her profession. Great people when they were interviewed about their success in the respective missions they invariably acknowledged the role of their teachers and the impact they had due to their contribution. Mr. Kapil Sibal, the former Minister for Higher Education, Government of India once made a controversial remark that the teachers serving in the public institutions were next to nothing. This evoked mixed response from the public as well as teaching fraternity.

1.11.1. Teachers in Public Institutions:

The teachers in Higher Education serving in the public institutions are blessed with UGC scales and the remuneration is perceived as adequate to lead a comfortable life. However, it is also perceived that only a smaller percentage of such teachers are totally committed to their job. By and large, the teachers are not really motivated. The status of such teachers may justify the Herzberg two-factor theory of motivation. The policy makers of higher education are pursuing several steps to make the job challenging so as to make the job content to motivate the teachers. At the same time, the teacher associations are challenging such attempts.
1.11.2. Teachers in Private Institutions:

The teachers in higher education serving in the private institutions are not blessed with UGC scales. Few institutions, such as, Amrita University, AMIT university, etc., are paying their teachers on par with public institutions. The management of the private institutions recognizes the contributions of their teachers through reward systems. Here again, the perception of the managements of the private institutions is not uniform.

Many private institutions are focused on specific activities such as students getting their ranks in the university examinations, conducting placement programmes in the campus, etc., and publicizing the achievements in their websites so as to attract the students for admission for the subsequent years. They failed to realize the overall development of the student as more important than merely getting the ranks, placements, etc. The teachers have a significant role in this context. When the students are groomed for overall development, they will be able to take up either gainful employment or profitable self-employment. The role of teachers will be very much crucial in this context. The researcher is of the view that by inculcating Entrepreneurial competencies amongst the teachers, they can turn around the situation leading to students taking up either gainful employment or profitable self-employment.
1.12. THE IMPACT OF ENTREPRENEURIAL COMPETENCIES ON TEACHERS:

The essence of entrepreneurship is ownership. There are a number of competencies being advocated to become entrepreneurial. In the experiences of Centre for Entrepreneurship Development (Tamil Nadu) with which the researcher was closed associated, three prominent factors were attributed in making a person entrepreneurial. These are Initiate, Innovation and Risk Taking.

1.12.1 Initiative:

An Entrepreneurial person will take initiative on his/her own. Seeking and acting on an opportunity is considered as an important competency of entrepreneurship. Initiative is also seeking and acting on an opportunity. There are teachers who approach a variety of funding organizations for financial assistance to take up various research and extension activities. They also undertake consultancy assignments. Such faculty members in IIMs are extremely popular amongst the students. However, it is also seen that there are few faculty members even in IIMs who are confined to the given activities. Several universities like Madurai Kamaraj University were built due to the efforts taken by renowned professors who had taken initiatives for research and extension activities.
1.12.2. Innovation:

“Winners don’t do different things; they do the things differently” – observed by Shiv Khera, a popular Management Trainer. The success stories of hundreds of entrepreneurs have revealed that they succeeded since they performed differently from others. The success stories of Idhayam Gingelly Oil-Virudhunagar, Hi-tech Arai Ltd.-Madurai, the CavinKare products, etc. demonstrated the significance of innovation. Several professors like Ashok Jhunjhunwala of IIT, Madras became popular due to his innovative approaches to communication issues.

1.12.3. Risk Taking:

Most of the teachers come from the middle income group. They are popularly known as middle class. They have an inherent hesitation to take risk. They do not challenge the existing system and procedures. Teachers who have taken risk in terms of research assignments, consultancy assignments, and complicated training assignments have become extremely popular. Several teachers in India working in the disciplines of sociology, social work, management, etc. had taken up research, consultancy and training assignments courageously dealing with commercial sex workers, transgender community.
Thus, these three crucial factors will be able to make a person entrepreneurial. Entrepreneurial persons do exist in all situations i.e. when a person is working for an organization, when a person is launching a commercial venture or when a person is undertaking an activity for a social cause. These persons are known as Intra-preneur, Entrepreneur and Social Entrepreneur respectively. Thus, Entrepreneurship is not an activity but a state of mind. It should be inculcated as a culture. Therefore, everyone whatever may be the activity undertaken i.e. job, business or social service should become entrepreneurial. The teachers also should be entrepreneurial to become better performers.

Entrepreneurial teachers have a passion for teaching. They are inspirational, open-minded and confident, flexible and responsible - but also, from time to time, rule-breakers. They listen well, can harness and sell ideas and can work student- and action- oriented. They are team players and have a good network.

They seek to close the gap between education and economy and include external experts in their teaching; focusing on real-life experiences. They always refer to the economic aspect of a topic; and business-related subjects play an important role in their classes – across the disciplines.
They follow a flexible and adaptable study plan and prefer interdisciplinary, project-based learning; using training material rather than textbooks. They put emphasis on group processes and interactions; and understand the classroom sometimes as a ‘clash room’, giving room for diversity – a diversity of opinions, answers and solutions and the reflection about the learning process.

An entrepreneurial teacher is more of a coach than someone who lectures. They support the individual learning processes of students and the development of personal competences.

The current thinking on entrepreneurial teaching is based on a number of recurring themes:

- Entrepreneurship education is more than preparation on how to run a business. It is about how to develop the entrepreneurial attitudes, skills and knowledge which, in short, should enable a student to ‘turn ideas into action’.

- Teachers cannot teach how to be entrepreneurial without themselves being entrepreneurial.

- Entrepreneurial competences require active methods of engaging students to release their creativity and innovation.
• Entrepreneurial competency and skills can be acquired or built only through hands-on, real life learning experiences.

• Entrepreneurial skills can be taught across all subjects as well as a separate subject

• Entrepreneurship education should focus on ‘intra-preneurs’ as well as entrepreneurs, in light of the fact that most students will use entrepreneurial skills within companies or public institutions

• To give entrepreneurship education real traction, there is a need to develop learning outcomes related to entrepreneurship and related assessment methods and quality assurance procedures for all levels of education. These should be designed to help teachers progress in the acquisition of entrepreneurial knowledge, skills and attitudes

• The entrepreneurship education agenda should be promoted beyond teacher education institutions to businesses and the wider community.

• Teachers and the colleges will not be able to realize their ambitions without cooperation and partnerships with colleagues, businesses and other stakeholders
1.13. IMPARTING ENTREPRENEURIAL COMPETENCIES AMONGST THE TEACHERS:

Faculty members have been described as purveyors of culture, engines of economic development, and generators of scientific, medical, and technological discoveries that transform human society\(^\text{48}\) (Schuster & Finkelstein, 2006). Faculty members have been characterized as institutional agents who can foster the development of social and cultural capital, particularly within and among historically disadvantaged communities\(^\text{49}\) (Stanton-Salazar, 1997).

Faculty members have been at the forefront of social change movements, and have been viewed as teachers and mentors who can empower students to achieve their highest potential\(^\text{50}\). (Kingston-Mann & Sieber, 2001).

Centra (1989) has proposed four possible types of development:

- Personal (interpersonal skills, career development, and life planning issues);
- Instructional (course design and development, instructional technology);

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• Organizational (ways to improve the institutional environment to better support teaching); and

• Professional (ways to support faculty members so that they fulfill their multiple roles of teaching, research, and service).

Faculty development programs can play an important role on college and university campuses by acknowledging the human needs of faculty members, and by providing the resources, social networks, and innovative ideas that can foster the fulfillment of those needs. The FDPs provide inputs on process and practice of Personal development and entrepreneurship development, communication and inter-personal skills, creativity, problem solving, achievement motivation training, inputs on resource and knowledge industries.

Faculty Development Programme (FDP) aims at equipping teachers with skills and knowledge that are essential for inculcating entrepreneurial values in students and guiding and monitoring their progress towards entrepreneurial career.

Entrepreneurship in recent times has become a serious area of study. It is considered to be a solution for creating wealth, generating employment and providing new goods and services.
Developing the spirit of entrepreneurship among the young has become vital because of the government cannot provide jobs for all kinds of unemployed youth, the corporate sector will provide limited jobs only to the best and that too without any job security and lastly, very often it is difficult to find an ideal job.

Entrepreneurship has very little to do with money. It is indeed an attitude, a way of thinking. It goes beyond simply starting a company. In other words not all people who start their own organizations can necessarily be categorized as entrepreneurs. Entrepreneurs challenge assumptions, recognize opportunities in periods of change, reveal patterns where others see chaos and mobilize limited resource to achieve an objective.

A Faculty Development Programme (FDP) in Entrepreneurship is designed to train and develop professionals in Personal development and entrepreneurship development so that they can act as resource persons in guiding and motivating young S&T persons to take up entrepreneurship as a career.

It is believed that entrepreneurs could be created through educational endeavors, or that Entrepreneurship could be a matter of teaching/training. A series of successful demonstrations by scholars like Prof. David McClelland and others, it was proved that entrepreneurs could be created through teaching, training and counseling interventions as well.
Progress since then has been swift and now Entrepreneurship Development has become almost a movement. While a large number of organizations are focusing on Entrepreneurship training, not much emphasis has been given to promote Entrepreneurship through educational interventions, particularly in our country. The need of the hour, therefore, is to make Entrepreneurship Development more effective by imparting relevant education focusing on developing entrepreneurial competencies, skills in identifying a viable business opportunity & preparing business plan, knowledge on how to mobilize resources and manage an enterprise. The most crucial change agents, however, in the process of developing young entrepreneurs are teachers with adequate skills, knowledge and information in the area of Entrepreneurship.

National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology (DST), Government of India, took the initiative of introducing Entrepreneurship in the academic curricula of science & technology institutions and also in setting up Entrepreneurship Development Cells in many of them. Entrepreneurship Development Institute of India (EDII) on the basis of interactions with educationists, students and entrepreneurship professionals designed a module on Faculty Development Programme (FDP) and has been implementing it successfully across the country and elsewhere.
Goal of the programme are to:

- Create an awareness of the need and importance of entrepreneurship.

- Impart knowledge and develop skills in diverse training methods in imparting training to students and entrepreneurs.

- Plan curriculum that can imbibe the skills and competencies to achieve goals directed by values, have a positive attitude and have the ability to cope with the changing times.

- Develop teachers with an entrepreneurial and professional mindset.

- Make them aware about promotional financial & regulating scheme of MSME.

- Guide them for techniques of preparation of feasible & viable project.

- Guide them for “Techniques of proposal preparation.”
1.14. **FDPS IN TAMIL NADU:**

The Department of Science and Technology, Government of India has been sponsoring FDPs to a number of institutions in Tamil Nadu for the past 15 – 20 years. CED (Tamil Nadu), Madurai alone has trained more than 1000 faculty members of the colleges and NGO professionals during the period of the past 15 years.

The researcher has proposed to conduct a study for knowing the impact of Faculty Development Programme (FDP) in Entrepreneurship on the knowledge, skill and attitude of the teachers who attended such FDPs. The researcher has also proposed to survey around 200 teachers (20% of the universe) from all over Tamil Nadu. The findings may be useful in strengthening the FDPs and the specific support the faculty members may require in promoting the Entrepreneurship Initiatives in the colleges, where they are serving.

The survey may also reveal the personal accomplishments of the teachers after attending the Entrepreneurship Training. The findings of the survey will be relevant to the policy makers, funding organizations, colleges, etc. in designing suitable strategies to make the teachers entrepreneurial.
1.15. ENTREPRENEURIAL COMPETENCIES AND WOMEN FACULTY MEMBERS

The researcher being a woman is naturally interested in identifying the facilitating and hindering factors for the women faculty members in acquiring entrepreneurial competencies as well as imparting entrepreneurship education to their students. In India in general and in Tamil Nadu in particular, the socio psychological factors inhibit the women in availing the opportunities for growth and utilizing the freedom to perform. The researcher has proposed to conduct a Focused Group Discussion (FGD) amongst the women faculty members to identify the issues and to address the issues.

The predominance of women teachers in the lower classes and even upto higher secondary education clearly demonstrates that the social psychological and cultural challenges are insignificant. This is because the focus of education is primarily teaching, counseling and character building of the kids and children. However, in Higher Education the focus is expanding to cover more dimensions such as research, training, consultancy and extension activities. The women teachers may not be able to confine to the specific timings and also develop elaborate networking for sourcing the information and speaking specific support in entrepreneurship promotion. An additional division has been added in the list of recommendations for enhancing the role of women teachers in higher education to work for entrepreneurship promotion.
1.16. STRUCTURE OF THE STUDY:

The discussion on this study is presented in the thesis in 6 chapters.

Chapter 1 – Introduction:
This chapter attempts to cover the Introduction to Higher Education, Global Scenario on Higher Education, International Organizations and Higher Education, Chronological evolution of Higher Education in India, Higher Education system in India, its growth, critical issues, Higher Education in Tamil Nadu, Role of Higher Education in the Society, Role of Faculty Members in HE, current status of faculty members in Higher Education, impact of Entrepreneurial competencies on faculty members, Faculty Development Programmes in Tamil Nadu and Entrepreneurial Competencies and Women Faculty Members.

Chapter 2 - Review of Literature:
This chapter brings out an illustrative list of earlier works done in the research area with the employability and higher education, Entrepreneurship, Entrepreneurship Education, faculty development programmes and Faculty development programme in Entrepreneurship.

Chapter 3 - Research Methodology:
This chapter deals with the Research design, data collection method, limitations of the research study.
Chapter 4 – Analysis:

This chapter deals with the analysis. Under this chapter, the demographic profile of the FDP participants, Entrepreneurship promotional activities through EDC, Entrepreneurship promotional activities without EDC, Institutional constraints that limit entrepreneurship initiatives, Approaching Funding Agency for Financial Assistance by the FDP participants through EDC, level of awareness among the FDP participants before attending the programme, level of attitude towards entrepreneurship promotion after attending the programme and impact of FDP in Entrepreneurship.

Chapter 5 - Summary of findings:

This chapter deals with the summary of findings analyzed in this thesis

Chapter 6 – Recommendations and Scope for further research:

This chapter deals with the summary of recommendations and scope for further research.