Educational Research and Reviews Vol. 1 (6), pp. 165-169, September 2006
Available online at http:// www.academicjournals.org/ERR
ISSN 1990-3839 © 2006 Academic Journals

Review

Learning Traditions and Teachers Role: The Indian Perspective

Seema Dogra and Anjali Gulati***

**Traditional Knowledge Digital Library, Industrial Toxicology Research Centre, Lucknow (India).
*Isabella Thoburn College, Dept. of Library and Information Science, Lucknow (India)

Accepted 18 September 2006

In this paper, the authors discuss about the Indian learning traditions and the role played by teachers in imparting education. They discuss the efforts played by government in enhancing education, Non-Governmental Organizations (NGOs) contribution in spreading literacy, various learning traditions from past to present such as *Gurukula, Kautilya*, participative learning. Further, they highlighted the educational technologies used like EDUNET, E-campus and EDUSAT in various schools giving the example of Delhi Public School (DPS) and open learning trends of India. Furthermore, they discussed the role of a teacher in Indian tradition and in modern education with the examples of Guru Gobind Singh Indraprastha University and Indian Institute of Technology Kharagpur. The paper concludes with the remarks of the authors in which they suggest to reframe the educational policy, emphasize on enhancing professional education in government institutions and universities and development of industry-academia partnership.

Key Words: Indian learning traditions; educational technology; learning trends of India; open learning trends; role of teacher in Indian education system..

Introduction

Rabindra Nath Tagore says "The highest education is that which does not merely give us information but makes our life in harmony with all existence."

Swami Vivekananda voiced "Education is the process of bringing out the potential that is latent in every human being." He enlightened that the very essence of education is concentration of mind, not the collection of facts. Also, unless curiosity is recognized and given its due place, creativity will find a back seat in the educational process. Thus the ultimate aim of any teaching method should be to develop concentration of mind and awaken curiosity for independent and logical thinking which ultimately will reach the higher level of research which is also a part of education, Menon (2002). Education is one of the important instruments for improving the quality of people, society and nation and it also helps in meeting the challenges of fast developments in the world. Mahatma Gandhi opined that "Illiteracy is a curse in our country" and the lack of universal illiteracy is one of the major factors which has thwarted total development in India since independence. The literacy and education have been termed as the best defense of a society against rising population, poor health, social strife and tensions, poor economic conditions, higher child mortality rate and education. In our national perception, education is essential for all and is fundamental to our all-round development whether material or spiritual. Education has an accelerating role and refines sensitivities and perceptions that contribute to national cohesion, a scientific temper and independence of mind and spirit thus furthering the goals of socialism, secularism and democracy enshrined in our constitution, Parhar (2005).

In a nutshell, literacy and education is the nucleus of social and national development. India's literacy percentage rose from 18.33% in 1947 to 64.8% in 2005 with 53.7 % of females and 75.3 % of males,

*Corresponding author. E-mail: seemadogra05@gmail.com.

http://en.wikipedia.org/wiki/india (2005).

Government Efforts to enhance Education

Since independence, eradication of illiteracy has been one of the major national concerns of the Government of India. To achieve literacy, the government of India had set up the National Literacy Mission Authority in 1988. The goal of this mission is to attain a full literacy, i.e., a sustainable threshold level of 75 percent by 2005 by imparting functional literacy to non-literates in the 15-35 years age group. This age group has been the focus of attention because they are in the productive and reproductive period of life, http://www.accu.or.jp/litdbase/policy/ind/ 2005. One of the recent governmental initiatives is "Class 2000 Project" under which 100 schools were to be developed into "smart schools" to impart computer based education, 1,000 to impart computer-aided education, and 10,000 for general computer Literacy http://www.educationtimes.com/goforit/Wired-schools.htm (2005).

NGO's Contribution towards spreading literacy

Non-governmental organizations working in education sector in India are professional resource centers and innovators and also able to reach children who are educationally disadvantaged. They extend education to underprivileged children in India and develop innovations that improve the quality of primary education. The government supports the efforts of NGOs to bring out-of-school children into schools through timely supply of teachers, classroom space, and other resources. They work for education of different types of out-of-school children, those who work, who live in slums, those on the street, those who are members of tribes or of migrant families, and those who live in places without schools. There are 136 NGOs working in the field of literacy, Jagannathan (2000).

Indian Learning Traditions

In ancient India, the system of education was in the form of 'Gurukula' (the home of the teacher) in which students had to stay with the teacher under the same roof for the entire period of their secondary school life. This tradition was named as 'Gurukulavasa' (staying and learning at the abode of the master).In Gurukula, the teacher not only taught his pupil mandatory subjects but shaped his character and personality by instilling in him an awareness of the world around him, to lead a life useful to the society and face various challenges which comes across in life and turn these into opportunities. Further, the student was also introduced to different subjects of study connected with the four principal divisions of knowledge namely: (I) *Anyikshaki* (i.e. sciences derived from subjective or metaphysical speculation involving keen introspection) (2) *Trayi* (the three vedas) (3) *Varta* (subjects relating to agriculture cattle rearing and trade) and (4) *Dandaniti* (science and art of government) under a competent teacher. During ancient times, education was totally free where besides imparting education, the teachers used to give food and clothes to their students unlike the modern system. After completing the course in 'Gurukulas', students used to go to some institutions in search of higher studies.

There are various schools of thought of Indian education system like 'Kautilya' who has given statistics and records about all agricultural and other properties in the village. The essential features of this system were moral education and character building in addition to intellectual learning. Another system was of Buddhists who had their own educational system and was entirely based on different principles. They never believed in caste distinctions, but in equality of all men and in equal status to women http://www.stat.auckland.ac.nz/~iase/publications/2/Topic9zh.pdf (2005).

Higher education has also grown significantly during ancient times. In the 6th century BC, the first university came to be set up at Takshila followed by the establishment of two more universities namely Nalanda and Vikramshila in the 4th and 5th centuries AD. The modern higher education system was only 140 years old when the first three universities were set up in 1857 under the British rule at Delhi, Calcutta and Bombay. The period 1857-1947 was the period of slow development of institutions of higher education in India http://www.education.nic.in/htmlweb/unhighedu.htm (2005).

Recent Learning Trends in India

Learning has shifted from monologue to dialogue i.e. participative learning took a lead and education is seen as a right and as a mechanism for self actualization. The goals of learning have transformed from acquisition of facts and information to higher levels of cognition, acquisition of the psychomotor skills and effective qualities of values, attitudes, emotions, etc.

Impact of Educational Technology

Educational technology prescribes a multichannel learning to suit learning needs of different people at different times to optimize human learning. It includes technologies like TV, radio, film projector, pictures and tables, internet, etc. In rural areas, earlier learning had

been through puppet shows, exhibitions etc. but now the government has started various primary schools and has been using educational technology for sensitizing rural population on diarrhea control, polio awareness, care of the girl child, women's equality, family welfare, anti-child labor and various types of rural employment programs for promoting awareness. Further to strengthen rural population, a TV serial 'Chauraha' was telecast by Doordarshan (television) every week in a bid to teach Hindi alphabets through animated puppets and dramas. Besides video films, two-in-one radio-cum audio cassette players and programmes recorded on audio cassettes were distributed to wider audience Parhar (2005).

In urban areas learning takes place through government, public, semi-government schools and colleges. There are various schools which are using educational technology like Delhi Public School (DPS) which has started NT LAN Lab (Local Area Network Lab) with the latest computing projection and audio visual support. Its activities at the Robotics Centre include building and programming individual robots to inculcate awareness in the field of automation. It has also introduced computer-aided learning and teaching at the primary school level. The tiny-tots are exposed to computers at a very early age. Apart from software, CDs containing multimedia presentations like films on animal life, national heroes, mythology, scientific discoveries etc on the academic curriculum are used to make the learning process more effective. Parent-Teacher interaction has been enhanced through e-mails and online admissions and counseling have also been introduced. The Audio Visual education has been made an integral part of education to make learning and fun go hand in hand. This marvelous experiment at this school has truly actualized the adage given by Rabindranath Tagore "Every child comes with the message that God is not yet discouraged of man" http://www.dpsrkp.net/primary_schools.htm (2005).

As time progressed, quite a few educational networks/ software/satellites have emerged such as:

● **EDUNET** or Education network enables a teacher to interact with one and all of his students through network and allows the transmission of his screen to each and every student's machine connected in the network. The teacher can also take control of the keyboard and mouse of student's computer while demonstrating the science practical. EduNET is installed in schools of -Convent of Jesus and Mary, (Delhi), Doon School (Dehradun), Laxmipat Singhania Academy (Kolkata) and Presidency School (Bangalore) http://www.educationtimes.com/goforit/Wired-schools.htm (2005).

● **E-campus** is complete campus management software for educational institutes. It helps the staff to handle students in better way and further the child's profile and performance in the exams, etc, can be recalled at an instance. It is also used for online attendance, campus security, access control etc. Besides this, it also supports absenteeism notification, fee payment reminder, book return request, voice mail, School schedules and other routine chores. It is running in St Frances De Sales, Salwan Public School, Silverline School and GD Goenka in Delhi, Delhi Public School, Patna and Naval Public schools all over India http://www.educationtimes.com/goforit/Wired-schools.htm (2005).

● **EDUSAT** or Education Satellite was launched by Indian Space Research Organization (ISRO) on 20th Sept.2005 to provide education to all primarily children from remote areas of the country that cannot go to schools or colleges. The classes are beamed to predestined areas on TV and students ask questions to the teachers who conduct classes through SMS, email or other modes of communication. In addition, these classes are also recorded on a CD and converted into a computer file and made available on the net, later, they are available from the archives at any date in the future http://www.alternativeeducationindia.net/edusat.htm (2005).

Open Learning: the latest trend

NFE (Non-Formal Education) is a vital aspect of India's current strategy on education as it can reach out to working children, school drop outs, girls and those who cannot attend full-time schools due to several socio-economic factors. In the perspective of open learning, open school system provides an alternative schooling to neo-literates who have acquired functional literacy and also to drop-outs from the school so that their schooling can continue at their own pace and time convenient to them. For e.g. National Open School (NOS) and the State Open Schools provide alternative means to acquire secondary level education in a flexible manner http://www.en.wikipedia.org/wiki/Education_in_India (2005).

The Open University System was initiated in the country to augment opportunities for higher education as an instrument of democratizing education and also to make it a lifelong process. The first Open University in the country was established by the state government of Andhra Pradesh in 1982 and follow by the establishment of Indira Gandhi National Open University (IGNOU) by the central government in 1985. IGNOU designs, develops and delivers high quality academic programmes in the Humanities, Sciences and Social Sciences as well as in professional areas like Computer Applications, Education, Engineering, Management, Nursing, Tourism and Library and Information Science. The University currently has 101 programmes comprising 900 courses and most of the programmes are structured on modular pattern. The university provides education to students who have no traditional qualifications for entering into

higher education, who have no other opportunities to make up for the lost time and those who are economically weak. It provides opportunities to students who are in the lower ranks of their careers and looking for opportunities to improve their qualifications, professional competence and new skills.

To deliver various services to its students, IGNOU has developed a nation-wide network of 48 Regional Centres, 6 Sub-Regional Centres and over 1,271 study centres all over India. The study centres and work centres are located generally in the premises of existing educational or training institutions that have made their facilities and services available to the IGNOU students. The IGNOU is also a national level apex body for distance education with the advent of open-learning in India, Distance Education Council has been established (a statutory authority under the IGNOU Act) which is responsible for promotion, coordination and maintenance of standards of open and distance education system in the country. Presently, there is one National Open University (IGNOU), eleven State Open Universities (SOUs) in India http://www.education.nic.in/htmlweb/higedu.htm (2005).

Role of a Teacher

In Indian tradition, the teacher is put on the highest pedestal along with one's parents and even higher than the God one worships. The ancient saints sang "Guru Brahma Guru Vishnu Guru Devo Maheshwar" (teacher is Lord Brahma, lord Vishnu and lord Shiva). Kabir enunciated " Guru Govind Dou Khare Kake Laagu Paun, Balihari Guru Aaapne jin Govind Dio Milay" (If teacher and God both stands together then student should bow to teacher because it is the teacher who leads the student to meet the ultimate power i.e. God) and the noted scientist C.V. Raman said "Principal function of a teacher is to discover talent and genius in the younger generation and to provide ample opportunity for its free expansion and expression," Rai (1999).

Dronacharya was the teacher of Eklavya, he worshipped an idol of his teacher, learnt his lessons in archery in the teacher's absence and mastered the art. He smilingly sacrificed the thumb of his right hand (thumb is the core part to be used for the art of archery) on teacher's instruction http://www.bologi.com/hinduism/mahabharata/06.htm (2005). Due to long and continuous domination of religious and spiritual features of Indian life, the teacher has been playing the key role in Indian education, and even in the modern educational system, the teacher is considered as the most important component of the education system. 'Guru' (teacher) was revered as a guide and an imparter of knowledge. In the present context also, his role remains as critical as ever and plays a major role in implementing the policies and schemes formulated to achieve a breakthrough in the quantitative expansion and qualitative improvement of education.

In modern higher education trends, the teachers are using state-of-the-art methods to impart education. For example, in Guru Gobind Singh Indraprastha University; teachers impart information to students through classroom teaching, field visits as well as through guest lectures. To stimulate logical, coherent and systematic thinking, students are encouraged to make interaction with the teachers. Further, seminars and discussions are organized to build up self confidence among students and also to encourage them to analyze the concepts and issues in a much broader perspective. Further students are also encouraged to solve critical and new problems and carry out a project in the fields of their interest. Assignments, quizzes and seminars are organized to provide a first hand and latest information to the students related to their courses http://higheredn.delhigovt.nic.in/ggsip.html (2005).

Another example where teachers are proactively using technology is Indian Institute of Technology Kharagpur. This institute alone has produced more than 60 full-semesters UG / PG courses which are recorded live in a specially equipped studiocum-classroom through on-line editing. The teacher during the lecture is required to sit at a table and do his "board work" on a blue-tinted paper with thick colored pens. The camera is positioned right above the paper to pick up the teacher's "board work" and another camera is placed in front of the teacher to record the teacher's face when he is speaking/explaining. A third source of input is the PC, which the teacher may use to demonstrate slides/programmes, etc. On-line editing takes place through a switcher which is used to record the relevant camera/PC source at the proper time. Since lectures are recorded in the on-line editing mode, each lecture is ready for copying and dissemination, as soon as the class is over. The courses are converted to CDs and sold at a nominal (non-profit) price to other institutions. In institutions that have a LAN framework, these courses are often loaded onto an internal server and used in the "video-on-demand (VOD) mode". In both, the use of CDs as well as in the VOD mode, control of learning pace remains with the learner, (i.e., the learner is able to "stop / start / pause / rewind" any portion of the course). The uses of these course materials in CDs or VOD mode have also been beneficial to students having a "language" problem or other learning disadvantages. Apart from educational institutions, the courses are also procured by R & D organizations and industry as training material for their staff http://www.col.org/pcf3/Papers/PDFs/Bhattacharya_Bani.pdf (2005).

Conclusion

Since independence, India has progressed by leaps and bounds in all walks of life and made significant contributions at all levels (primary, secondary and higher)

of education. But there are few lacunas in our Education system like obsolete course curriculum at traditional universities, no sustainability of existing technological infrastructure in educational institutions according to current demands, lack of political will and bureaucratic setup. Thus, we feel that there is urgent need to reframe educational policy and the committee for forming the policy should not only have the higher officials, Ministers or bureaucrats but also should comprise of primary school teachers, secondary school teachers, the teachers of higher education, youth/student representatives and also the leaders from local community. The outcome of this kind of arrangement would surely bring out a fool-proof education system which will give equal rights to each and every one in a real sense.

In addition, there is urgent need to develop and enhance professional education in government institutions and universities in partnership with private sector to alleviate the unemployment problem among the restless Indian youth. This may be achieved by initiating and developing tailor made courses in interdisciplinary, intradisciplinary, multidisciplinary and hybrid subject fields. Perhaps a strong 'industry-academia partnership' should be developed in traditional universities besides having it in technical institutions like Indian Institute of Technology (IITs) and Indian Institute of Management (IIMs).

References

Madhava Menon NR (2002). Role of teachers in the Pursuit of Academic Excellence. University News, 40(3), Jan.21-27.

Parhar Madhu (2005). Application of Educational Technology in Adult Education.

http://www.literacvonline.org/products/ili/webdocs/parhar.html visited on 10 Oct.

http://en.wikipedia.org/wiki/india visited on 17 Oct 2005

http://www.accu.or.jp/litdbase/policy/ind/ visited on 16 Oct 2005

http://www.educationtimes.com/goforit/Wired-schools.htm visited on 20 Nov 2005

Jagannathan, Shanti (2000). The Role of Nongovernmental Organizations in Primary Education: A Study of Six NGOs in India, November 2000, World Bank Policy Research Working Paper No. 2530.

http://www.stat.auckland.ac.nz/~iase/publications/2/Topic9zh.pdf visited on 24 Oct. 2005

http://www.education.nic.in/htmlweb/unhighedu.htm visited on 12 Aug. 2005

Delhi Public School R K Puram http://www.dpsrkp.net/primary_schools.htm visited on 20 sep. 2005

http://www.alternativeeducationindia.net/edusat.htm visited on 18 Oct. 2005

http://en.wikipedia.org/wiki/Education_in_India visited on 10 Oct. 2005

http://www.education.nic.in/htmlweb/higedu.htm visited on 30 Oct.2005

Rai DK (1999). Role and Responsibility of a teacher, University News, 37(46), Nov.15, pp. 5-7.

http://www.bologi.com/hinduism/mahabharata/06.htm visited on 5 Oct 2005

http://higheredn.delhigovt.nic.in/ggsip.html visited 25 Nov. 2005

http://www.col.org/pcf3/Papers/PDFs/Bhattacharya_Bani.pdf