Learning Strategies and Audio-Visual Aids used in Adult Education in India: A Historical Overview

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Abstract: Education is the first step towards empowerment, and the most crucial factor in the overall development of an individual as well as the nation. In India, education in general, and adult education in particular, has been through a series of changes since its origin as a welfare activity, to its emergence as a tool for social and political awakening in the country. Operationalized into various programmes, schemes and projects, as - basic literacy, civic literacy, functional literacy, and developmental literacy; adult education eventually evolved with the identification of the emerging needs of learners in the democratic society post-independence, with the discovery of new educational objectives, thus shifting the focus to the need for development of new methods and techniques of instructional delivery in adult education. The use of need-based learning strategies and audio-visual aids in education can help in addressing the pedagogical issues in adult education by promoting active learning, facilitating in the acquisition and retention of factual information, enhancing autonomy and learning achievement of adult learners and helping them in choosing what, where and how to learn in a purposeful way. Various strategies have been used since the ancient period in India to preserve, impart and retain knowledge, which necessitates a re-look at the different stages that adult education has witnessed in the development of instructional materials, mediums and techniques, structure, systematization of knowledge and the mode of delivery, that has guided the learning process. The present paper attempts to explore the learning strategies and the audio-visual aids used in adult education by revisiting the series of measures taken in adult education in the country.

Introduction

Learning is a lifelong process. It begins with the intention to utilize the acquired knowledge in achieving certain self-determined goals; and when apparently undertaken with no stated purpose, there often appears to be a 'hidden goal' of achieving a sense of fulfillment or making meaningful use of leisure. While Adult Learning is a complex process, the scope of Adult Education is as wide as life itself. Broadly defined as a process that aims at "extending educational options to those adults, who have lost the opportunity and have crossed the age of formal education, but now feel a need for learning of any type, including, basic education (literacy), skill development (vocational education) and equivalency" (MHRD, Govt. of India); the final outcome of adult education "must be to equip man to play his part harmoniously in the modern world" (UNESCO, 1950). Since the perspectives on adult learning have changed dramatically over the decades (Cranton, 1994; Paterson 1979: 13), especially because of its relationship with the different and hence changing social, political and cultural contexts in which it takes place (Anowor, 1986; Anowor et al., 2001); the term 'adult education' in some countries is used in a comprehensive manner covering all facets of education for those who left primary and secondary schools (Smith, 2002), while in others it

implies in a restricted manner - 'basic literacy' for adults. However, irrespective of these differences, it is universally accepted that one of the major planks in the strategy of a society which is determined to achieve economic development, social transformation and effective social security; should be to 'educate its citizens to participate in its developmental programmes,' willingly, intelligently and efficiently (Education Commission, 1964-66). The function of Adult Education in a democracy is to provide every adult citizen with an opportunity for education of the type which they wish and which they should have for their personal enrichment, energisation of the cultural creativity, professional advancement, and effective participation in social and political life and the development process (NCERT, 1971: 778; MHRD, 1986).

With the concept of Lifelong Learning, a life-cycle approach to learning further diminishes all boundaries, stressing that learning lasts for life, from the cradle to the grave; and encompasses 'formal learning', 'non-formal learning' and 'informal learning'; to allow people to access learning opportunities as they need them rather than because they have reached a certain age (World Bank, 2003). The principal function of education is therefore to help individuals to learn, embracing both the 'content' and the 'process' in learning (Hargreaves, 2004); with enough opportunities to clarify, question, apply, and consolidate new knowledge. And the use of need-based learning strategies and audio-visual aids in education can aid in effective learning by facilitating in the acquisition, comprehension and retention of factual information, and enhancing the learning achievement of learners (Amadi, 2002; Nicholls, 2000; Raw, 2003).

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When a field formally undertakes an examination of its past, it is often a way of constructing itself in the present (Glick, 1992). Over the last few decades, a gradual but significant shift has taken place in education, where the constructivist view in knowledge acquisition places greater emphasis on the role of learners in constructing knowledge (Lessard-Clouston, 1998); in their own systematic way of information transformation using positive strategies (Rubin, 1975; Stern, 1975); and also being more conscious of the strategies they use and the reason as to why they use them (McKeachie et al., 1987; O'Malley and Chamot, 1990). Basically understood as the "behaviours and thoughts that a learner engages in during learning" (Weinstein and Mayer, 1986, p.315); 'Learning Strategies' encompass the "entire spectrum of the learning environment" including the media, methods, materials, technologies and style meant for achieving the learning objectives, and the conscious efforts and skills strategically employed in solving learning tasks in the most effective way (Ekwenski et al., 2006; Schmeck, 1988). Despite the uncertainty in the origin and use of audio-visual aids and learning strategies in adult education in India; their use in the adult education discourse within the changing social and political set up in the country, can broadly be studied under two historical segments:
(1) Education in India - *The Pre-Historic, Ancient and Medieval Period*
(2) Growth and Emergence of Adult Education in India - *The Pre-Independence and the Post-Independence Period*

(1) Education in India - The Pre-Historic, Ancient and Medieval Period

"Knowledge does not narrow, knowledge only adds, and without knowledge many experiences in life remain very narrow and very shallow..." (Lewin, W.). India has been a cradle of diverse knowledge. And the acquisition and transmission of knowledge through socialization and cultural

process in the Indian society has been prevalent since time immemorial (Hudson, 1851). However, education in India is known to have formally begun with the transmission of traditional knowledge on religion, philosophy, logic, arts and crafts, mathematics; offered using various approaches and a variety of mediums, formally and informally. Knowledge was initially transferred to the younger generations through the elderly in the family, with suitable changes, innovations and adaptations in accordance with the requirements of time, culture, and tradition. The systematization of the bodies of knowledge by early tribal authorities, and the invention of pictographs or sign writing by early cultural civilizations to record and transmit information, probably marked the beginning of the use of instructional aides and techniques in India. The archaeological evidences like the human remains, cave paintings, ancient tools and the other prehistoric arts present direct evidence of the role that technology played in that period, primarily in controlling, hunting, food preparation and survival. According to the earliest surviving records of Indus culture, the Indus-Sarasvati cultural tradition used Brahma script, while the carvings on seals, small pieces of soft stone, and copper tablets are the main surviving records of the writing of the Harappa civilization. Most of the texts were very brief, with an average length of 5 signs. In the Bronze Age Indus Valley Civilization (2500-1900 BCE), use of the Indus Script is reported, while the period may also have known 'cartographic activity' (Schwartzberg, 2008), as is evident in a number of excavated surveying instruments and measuring rods and large scale constructional plans. Also, a number of map like graffiti are found among the Indian cave paintings of the Stone Age; besides a complex Mesolithic diagram as a representation of the cosmos which suggests knowledge of cosmological drawings and the ability to conceptualize in a cartographic manner was known in that period (Gole, 1990).

Learning in Ancient India was primarily tied to traditional or religious knowledge; where the ancient *Gurukul* system, middle age *Maktabs*, *Masjids*, *Khanqah*, served as the primary institutions of education and are known to have used their own instructional aides. The *Gurukul* system was closely related to religion and a sacred practice; wherein the learners or *Shishyas* lived in *ashrams* together as equals, learning under the guidance of the *Guru*, who prescribed strict monastic guidelines which the disciples were bound to abide. The Oral tradition or *shruti* was used in spreading knowledge verbally, followed by reflection, constant revision and discussion through the steps of *sravana*, *manana* and *nididhyasana*. This 'individualized instruction' was devised to suit the learning needs, maintenance of the oral tradition of the *Veda* (Mookherji, 1951) and teaching of social science for social efficiency and welfare. The access to written texts and sacred knowledge was not open to all, since "the craft of reading and writing remained the sacred monopoly of small circle of elites" (Cipolla, 1969); while memorization of the text was only meant to preserve the intact accent and pronunciation of words through techniques of different *paaths* or sequences to recheck and avoid deviations. Rote learning and blind following of the guru was discouraged. Initially education was open to all and considered a means of gaining *moksha* or enlightenment; but gradually was confined to the elite, and tied to the caste-specific roles and occupations in the society.

One of the chief characteristic of the Buddhist education system in India was institutional organization. The *shastrartha* method aided in improving the skills of discussion, logical debates, and establishing the cult. Discussions were also held at public meetings by wandering scholars or *Carakas* who addressed the masses. Equality is reported to have existed between the sexes in the field of knowledge (Altekar, 1944). India has witnessed flourishing tradition of scientific research and technological development dating back to over 2,600 years, at Taxila and Nalanda, the earliest universities in the world. However, most of the knowledge was lost during the medieval period. Organization of conferences, reading of commentaries, dialectical debates, isolated spiritual mediation in forests and caves, learning through tours, assembly of learned people for

maintaining the moral standard, practices like memorization, hearing the doctrine and gaining personal experience aided in learning and living together with social harmony (Jameela, 2013). Worldly, religious and practical knowledge were imparted through the methods of expedience of Buddha, through answering queries for the development of wisdom. During the Gupta period, learning took place through the oral method which later shifted to the reading of literary texts on Vedanta philosophy, study of the *Puranas*, Epics, Grammar, Logic, Astronomy, Philosophy, Medicine etc under the ten year education system. Sanskrit, which was the court language, was the medium of instruction. The Buddhist monasteries had libraries, where important manuscripts were copied and stored. Books called *granthas*, written on palm leaves and tied together, were present in the Jain and Buddhist libraries. Besides, the *Mathas*, which were supported by Brahmins, functioned like *ashramas* for educational purposes, and adopted method of inquiry and debate for national discourse to stimulate critical thinking and illuminate ideas. The legendary paintings, charts used for the purpose of navigations, maps of locations discussed in Indian epic poetry like the Ramayana, early maps like the Udaigiri wall sculpture made under the Gupta period depict the cartographical ability of Indians during this period. In ancient India, hard material like stone, metal, shells and bricks, wooden board, earthenware and terracotta were used for writing - through engraving, embossing, painting and scratching; while the inner bark of *bhurja* (Betula) tree was the most popular material for writing manuscripts, especially in north-western India, and Palm-leaves were widely used in southern parts of India. While the use of Leather was predominant in western Asia and Europe in early and medieval times, it was rarely used as a writing material in India.

Learning in the medieval period in India, followed the tradition of oral transmission of knowledge, values and culture; through the scholars, saints, teachers, artists and artisans who actively spread the message of peace and harmony through various art forms, music, preaching and writings. Knowledge was shared through practice and observation. With the discovery of scripts, verbal transmission of knowledge was replaced by the written records. The use of paper started in the medieval period after the establishment of the first paper industry in India; and the hand-made glazed paper and the famous *Khurasani* paper were remarkable products of this period. During the Mughal period, since there were no printed books during Akbar's reign, the important handwritten texts were read aloud in the court and discussions were held which benefitted the aristocracy. The Indian cartographic knowledge during the medieval period is depicted in the Maps from Ain-e-Akbari, Mughal documents, the seamless globes, the Atlas compiled by Scholar Sadiq Isfahani of Jaunpur, the largest known Indian Map depicting the former Rajput Capital at Amber, Indian maps reproduced by European scholar Francisco I, the Cartographic Charts made by the Dravidian people of India as described in the early volumes of Encyclopedia Britannica and the Maps of Indian origin discovered from Tibet etc that depict Indian history and traditions during the middle ages (Jameela, 2013). The educational institutions in India during this period were primarily the *Maktabs, Masjids, Khanqah* (Sufi centers), and the *Paathshalas*, which all existed in harmony. Learning the Holy Quran in the guidance of a local teacher; besides, also learning the prose, poetry and some elementary Arabic was considered important to be able to perform religious functions. This was eventually followed by the intensive study of the Arabic language and *fiqh*, to engage in teaching, preaching etc. The later stage dealt with advanced books of each science. Rational science and Kalam or dialectics did not find much emphasis in the curriculum. Calligraphy was an important element of instruction; and due to the scarcity of printed books, before the coming of the press, wooden books or *takhti* were used. Secondary education in this period was imparted in the *Madrasa*, a special room in a *Masjid* set apart for teaching purposes, where instruction comprised the memorization, recitation, collective discussion, reading aloud, and then writing down the lessons. The *Madrasa* functioned as a college of

Higher Education with the Lectures of learned Scholars of different subjects, supplemented by discussion and reflection.

The instruction through *Paathshalas*, that were organized in verandah of some houses or under trees, comprised the study of arithmetic, particularly the knowledge of weights and measures, study of literature, and moral and religious mythologies. In the initial stage of the elementary phase; writing letters of the alphabet in sand was taught, followed by the writing on palm leaves by the teacher and then traced over by learners with red pen and charcoal ink, so that they can be rubbed easily. This was followed by writing, pronouncing and excessive practice of compound components, while the use of paper for writing purposes was taught in the fourth stage. Temples in the society served as social centres, meeting places and centres of village ceremonies and religious and social discourses, besides also imparting literacy to children (Patwardan, 1939).

Education in medieval India lacked a popular medium of instruction. Though it was mainly dependent on the interests of the rulers; the egalitarian philosophy of Islam facilitated the open access to education to all during the Mughal regime. The teachings of the Holy Quran and Prophet Mohammad (PBUH) emphasized on the acquisition of knowledge from the 'cradle to the grave'. The cause of free and compulsory education for the masses was championed first by the Mughal ruler Aurangzeb, though enforced only on an experimental basis in Gujarat among the Bohra community, which later paved way for the high rate of literacy in this community in the country (Ahmed, 1987, in Shah, n.d.).

(2) Growth and Emergence of Adult Education in India - The Pre-Independence and the Post-Independence Period

Education is that which liberates, from ignorance and oppression; and is the first step towards empowerment. In India, education in general and adult education in particular, has been through a series of changes since its origin as a welfare activity, to its emergence as a tool for social and political awakening in the country. A number of initiatives were taken by the social and religious organizations and the civil society to promote adult education in India, since there were no formal institutions in place to impart literacy to adults; however the word 'adult education' was coined in the year 1851. Operationalized into various programmes, schemes and projects, as - Basic Literacy (1882-1947), Civic Literacy (1948-67), Functional Literacy (1968-77), and Developmental Literacy (1978-till present) (Shah, n.d.); adult education eventually evolved with the identification of the emerging needs of adult learners in the democratic society; with the discovery of new educational objectives, post-independence.

Adult education is known to have formally taken roots in the beginning of the nineteenth century when the European missionaries, educationists, and a few British officials of the East India Company began setting up schools in some parts of India to educate people for the upliftment and the transformation of the Indian society in the pre-independence era. Indigenous efforts though, in the field of education, are reported in the late eighteenth and the early nineteenth centuries that put light on the 'reality of India' before the arrival of the Britishers; its society, infrastructure, manners and institutions and their strengths and weaknesses (Dharampal, 2000). Under the colonial rule, adult education was promoted as a non-governmental activity, and particular emphasis was placed on elementary education as an effective means of achieving literacy. Though the efforts were modest, the secondary importance given to adult education during this period made it difficult for adult education to emerge and grow as a distinct field of activity, until the 1920s and 1930s period in the country (Shah, 1999). The Indian education substantially changed

under the British, when the Indian village education system was replaced by the 'factory system' of education, with centrally controlled curricula, text books, school hours, and holidays during their rule. The preference for the English medium of education deprived people the knowledge of their own language and literature and they were compelled to cram the rules of grammar of a foreign language. Established by the Christian missionaries, the missionary and boarding schools marked the beginning of modern schooling in colonial India and comprised only of the developmental activities which served the colonial interest; whereas the role of science education, scientific and technological research in economic growth and social transformation was rather limited. Although, the use of instructional aides like blackboard, pictures, graphs, charts, maps, symbols, models, printed materials, flashcards, samples and concrete materials, which was later followed by the development of audiovisual aids such as audio tapes, videos, recording devices, movies, magic lantern, slide projectors, audio-visual projectors and radio, found place in the modern classroom.

Night schools that were modeled after British Adult Schools were the key adult education institutions in British India. Though few in number, night schools were mainly set up by the Christian Missionaries, nationalist leaders, socio-religious organizations and intellectuals, and were encouraged wherever practical and with as much flexibility as possible in learning hours. The core curriculum included simple lessons in stories of historical importance, elementary lessons in health, hygiene and first aid (Govt. of India 1940); and rudiments of reading, writing and numeracy, covered within a minimum of 100 days. Average instruction per day was of 2-3 hours duration. Every province in British India had provisions for setting up night schools and Bombay and Madras are reported to have 134 and 312 night schools with an enrolment of 4000 and 7000 adults respectively (The Indian Education Commission, 1882; Report of the Indian Education Commission 1882, 1883, in Shah, n.d.). Although 'illiteracy' among the Indian masses attracted attention of the British, the lack of resources and trained personnel to take up Adult Education Programmes were cited as the major reasons why the colonial rulers did not develop any specific programmes to liquidate adult illiteracy (Shah, 1999); which eventually led to the adoption of the 'Downward Filtration Theory' in 1830's which held that "education was to permeate the masses from above. Drop by drop from the Himalayas of Indian life, useful information was to trickle downwards, forming in time a broad and stately stream to irrigate the thirsty plains" (Mathew, 1926). However, the Downward Filtration Theory received criticism from The Education Despatch (1854), which supported mass education and laid special emphasis on preserving and encouraging indigenous education. These efforts were though hindered by the middle class interests, which had become intertwined with those of the ruling class (Acharya, 1988). The stagnation and decay of indigenous education, the 'undercurrent' of the imperialist project, surfaces with a re-look at the profound and inescapable effects that colonization had on literary production, that led to the annihilation of indigenous education in India (Dharampal, 2000; Ashcroft et al, 2007). Under the British rule, the individualism of the 'indigenous' completely disappeared which is quite evident from Mahatma Gandhi's Chatham House Speech (20th Oct, 1931) in London, where he refers to the decay of the indigenous education in India.

> I say without fear of my figures being challenged successfully, that today India is more illiterate than it was fifty or a hundred years ago, and so is Burma, because the British administrators, when they came to India, instead of taking hold of things as they were, began to root them out. They scratched the soil and began to look at the root, and left the root like that, and the beautiful tree perished. The village schools were not good enough for the British administrator, so he came out with his programme. Every school must have so much paraphernalia, building, and so forth. Well, there were no such schools at all. There are statistics left by a British administrator which show that, in places where they have carried out a survey, ancient schools have gone by the

board, because there was no recognition for these schools, and the schools established after the European pattern were too expensive for the people, and therefore they could not possibly overtake the thing. I defy anybody to fulfill a programme of compulsory primary education of these masses inside of a century. This very poor country of mine is very ill able to sustain such an expensive method of education. Our state would revive the old village schoolmaster and dot every village with a school both for boys and girls (Mahatma Gandhi, on Indigenous Education, p. 346, in Dharampal, 2000).

This argument on the indigenous education in India can also be aptly encapsulated in the words of S. Radhakrishnan.

The spiritual motive dominates life in India. Indian philosophy has its interest in the haunts of men, and not in supra-lunar solitudes. It takes its origin in life, and enters back into life after passing through the schools. The great works of Indian philosophy do not have that ex cathedra character which is so prominent a feature of the latter criticisms and commentaries. The Gita and the Upanishads are not remote from popular belief. They are the great literature of the country, and at the same time vehicles of great systems of thought. The Puranas contain the truth dressed up in myths and stories, to suit the weak understanding of the majority. The hard task of interesting the multitude in metaphysics is achieved in India. (Radhakrishnan, 1999)

The British, although, are reported to have sponsored Sanskrit and Persian colleges as well as promoted the publication of some Indian texts or selections from them, but only for what suited the purpose of their governance and the colonial interest. It is reported that it was the British who declared the Vedantic Hinduism of the Brahmins of Banaras and Navadweep as 'the standard Hinduism', and in the process, the cultural heritage of the lower castes was 'successfully marginalized' which remains an 'enduring legacy of colonialism'. Further, the limitless British hunger for revenue starved the Indian education system of the very resources which it required to survive; and their evaluation of the content of indigenous education and its eventual dismissal, was an imperative effort of the Britishers to somehow uproot the Indian indigenous system for the relatively undisturbed maintenance and continuance of the British rule. While, the major reason for the lack of reference about the actually prevailing circumstances regarding education in the country in that period is because those who wrote on education were themselves uninterested in how such crafts were taught (Dharampal, 2000).

Eventually, the nineteenth and early twentieth century witnessed significant efforts from the nationalist leaders and leaders of social, political and religious reform organizations, like Mahatma Gandhi, Rabindranath Tagore, Dadabhai Naoroji, Dr. Zakir Husain, Gopal Krishna Gokhale, Keshab Chandra Sen, Sir Syed Ahmad Khan, who opposed the idea of restricting the access to knowledge to the upper and middle strata of society; and promoted mass education through vernacular languages (Pannickar, 1975). Notable efforts were the setting up of the 'Sangat Sabha' society in 1859 for the discussion of spiritual and social problems; and also the 'Bama Hitaishini Sabha' (Society for the Welfare of Women) by Keshub Chandra Sen, where learned women could read newspapers and hold discussions for social and intellectual consciousness, to enable them to be able to respond readily to the schemes introduced for their upliftment. Swami Vivekananda held that greater part of the education being spread to the masses should be given orally and in vernacular languages, since "education is not the amount of information that is put into brain and runs riot there, undigested", instead, there is a need to have "life-building, man-making, character-making assimilation of ideas. If you have assimilated fine ideas and made them your life and character, you have more information than a man who has got by heart a whole library"

(Advaita Ashram, 1990; in Shah, n.d.). During this period, pioneering work of educating the masses is also reported through the social reform societies like the Brahmo Samaj, Prarthana Samaj, Arya Samaj and Indian Social Conference, through Publications and Public Lectures, Extension Lectures, network of circulating libraries, a variety of Community Development Programmes, Night Schools for illiterate masses and Summer Schools for literate adults, Films, Slides on various aspects of Health, Society, Economy and Polity; as well as mass mobilization and conscientization through public lectures and discussions to generate awareness among the masses about their rights and to motivate them to join the struggle for freedom of the country. An innovative rural reconstruction campaign was also started by some enlightened British officials, wherein a large motor van with the facilities of an inbuilt library, a radio-set, a cinema projector, a dispensary and a public address system was arranged for the provision of education, awareness, entertainment and medical help for the rural masses. In the van, a team of adult educator, a doctor, cinema technician, a driver, peon, and cleaner travelled to provide the necessary support; and besides exhibiting the books and lending them to the villagers for reading, some selected books were also read out to the illiterate masses to generate interest and promote the joy of reading. Rabindranath Tagore's novels, stories, poetry, songs, dance-dramas, art works and essays spoke to topics political and personal; through which he opposed imperialism and supported the Indian nationalists. He urged the masses to give up 'victimology'; quoting the presence of Britishers in India as a "political symptom of our social disease". Tagore held that even in extreme poverty, "there can be no question of blind revolution", but to seek self-help through "a steady and purposeful education" (Chakravarty, 1961; Dutta and Robinson, 1997).

Since the late eighteenth century had witnessed an unprecedented degeneration of the Muslim community in India, after the failed mutiny of 1857; Sir Syed Ahmad Khan made constructive contribution in regenerating and rejuvenating suppressed Muslims, by taking upon himself the challenge of educating Muslims, pushing ahead the community in development, and transforming social and intellectual India with the most modern scientific education at that time. He was the first to use the term "Scientific temper", which later on became a pillar of the Constitution of India. Being a social reformer, an educationist, a political ideologue, a journalist and writer, historian, archaeologist and above all a humanist; Sir Syed made significant efforts in promoting secularism, cementing the relations between Hindus and Muslims whom he termed "the two eyes of a beautiful bride". He was in strong denial of superstitions, magic and mystic and promoted following healthy lifestyle, and giving up conventional, unhygienic, unscientific traditions and customs. He emphasized on religious tolerance; and was also a champion of women rights, encouraging widow-remarriage and promoted the education of girls. He popularized his ideas through his journal 'Tahzib-ul-Akhlaq' to ameliorate the social conditions of Indian Muslims. By writing "Asbab-e-Baghawat-e-Hind" (Causes of Indian Revolt) to highlight that the policies of the British Government were responsible for the mutiny, at a time when it was unimaginable to utter a word against the British, he proved his nationalistic approach towards problems and controversies prevailing at that time. To empower the country to survive with dignity, Sir Syed set up an institution, the M.A.O. (Mohammadan Anglo-Oriental) College in 1877 at Aligarh; which later on became the renowned Aligarh Muslim University. Significant contributions were also made in the educational reforms in India by Dr. Zakir Husain, who emerged as one of the most prominent educational thinker and practitioner of modern India. He founded the Jamia Millia Islamia University in New Delhi, an institution that was intimately involved with India's struggle for freedom; and experimented with value-based education on the lines advocated by Mahatma Gandhi and Hakim Ajmal Khan. Notable efforts were also made by him in the affairs of his old alma mater the M.A.O College, now the Aligarh Muslim University (AMU) in Aligarh. Dr. Zakir Husain was instrumental in bringing out the anthology of the great Urdu poet Mirza Asadullah

Khan 'Ghalib' (1797-1869); thereby enriching and promoting the Urdu language in the country as a symbol of dignity, love and culture.

Several attempts were also made in 1930s, to evolve effective literacy materials and methods in various Indian languages, of which the development of innovative literacy primers (based on keywords and pictures) through a series of literacy workshops, based on the technique of 'Each One Teach One' developed by Dr. Frank C. Laubach, was a notable initiative. His work on 'India Shall Be Literate' which highlights the nature of Indian adult education during the 1930s is an important publication on adult education in India (Laubach, 1940; in Shah, n.d.). During this period, apart from the literacy programmes, focus was also on setting up of adult education institutions, like the 'Idara-o-Talim-o-Taraqqi' (Institute of Adult Education) in Jamia Millia Islamia (1938) set up by Shafiq-ur-Rahman Kidwai and the Rama Needu Adult Education Institute in Andhra Pradesh set up by N. G. Ranga in the year 1933. A number of activities and campaigns were organized and various publications were brought out by these institutions on adult education during the 1930s. Also various libraries and learning centers were set up during the 1940s, with about 60 percent of the instructors involved being either volunteers or non- professional teachers. The success of these literacy programmes through the involvement of volunteers, created conducive environment for the development of adult education movement in India supported by nationalist leaders, non-governmental agencies, and social reformers, and the need for a central organization for adult education. This led to the foundation of Indian Adult Education Society in Delhi in 1937 and ultimately the Indian Adult Education Association (IAEA) in 1939 for promoting the development of adult education movement in the country.

Adult Education for Social Mobilization - Concept of Basic Literacy (*Nai Taleem*) and Civic Education (1882 - 1947)

Mahatma Gandhi's concept of Basic Education (*Nai Taleem*) was a significant effort in adult education, which was based on simple pedagogy, having the same principle both for children as well as adults. For adult learners, activity-based learning was encouraged to make learning relevant to their life's immediate needs for motivating them and generating interest amongst the poor and illiterate adult population in the rural areas to learn. This helped in boosting the spirit of cooperation amongst the learners to broaden their mental horizon and ensure unity and participation in the freedom struggle (Nayar, 1980). With the introduction of a new syllabus of adult education in this period, adult education subsequently got a new orientation with Mahatma Gandhi's experiment in education. The syllabus was broadened to include civic education for adults, besides literacy skills, and the media included publications, posters, cinema shows etc. and was primarily the major factor in influencing the concept, purpose and role of adult education during the nationalist movement in India. The curriculum and content used in the Mass Literacy Campaigns (MLCs) in the provinces were primarily primers and charts. While charts were meant for imparting literacy through alphabetical method as used in formal education system, the Primers largely aided in awareness generation through knowledge on concepts of illiteracy, ignorance and poverty (Singh, 1957).

Post-independence, adult education witnessed gradual progress with significant focus in the Five Year Plans. Maulana Abul Kalam Azad, the first Education Minister of India, took keen and personal interest in adult education, and emphasized on education in citizenship. He stressed on the provision of information which would aid in the personal, social and economic upliftment of people, and encouragement of art and literature, including creative activities (Bordia, 1981).

Social Education for Consciousness and Democratic Citizenship (1948 - 1967)

One of the major thrust areas of national concern since independence has been the eradication of illiteracy. Post-independence, with India emerging as a democratic nation, the concept of adult education broadened from the idea of mere literacy to "social education" with the adoption of a welfare approach to development to cater to the changing needs of a democratic nation. Since during the time of independence, the country was socio-economically backward and underdeveloped with a low literacy rate of 12.2 percent, and a large number of people were displaced during the partition of the country which led to the disruption of social life and the depletion of resources; ultimately, a need was felt for activities that could improve the social and economic conditions of the poor to make freedom actually meaningful. The task of "reviewing the role of adult education and reinterpreting its functions in a democratic setup" was eventually taken up by the Indian Adult Education Association (IAEA), a non-official organization of professional adult educators (Shah, n.d.). This was for the first time when the social aspect of adult education was emphasized by professional adult educators. Social education was hence conceptualized as a "course of study directed towards the production of consciousness of citizenship among the people and promotion of social solidarity among them" (Govt. of India, 1951). In the First Five Year Plan (1951 - 1956), adult education therefore was focused upon and strengthened through the Social Education programme, integrated with Community Development Programme (1952), which subsequently led to the rise in the literacy rate from 16.07% in 1951 to 31.11% in 1961, partially bridging up the inter-state, rural-urban, and social and gender disparities. Of the centre-based projects, schemes and programmes, though all had ambitious plans, targets and outlays; it was the Social Education Programme which ran the longest spread over the first three Five Year Plans. With the aim of "community upliftment through community action", the Programme covered agriculture, irrigation, communication, education, health, social welfare etc and was conceived as a centre-based programme at block level. The period also marked increased focus on establishment of model community centres, adult literacy centres, farmers' groups, recreation centres, rural libraries, Janata Colleges, Youth Clubs, Mahila Mandals, folk schools, the expansion of library facilities, and training of gram sahayaks. Under the First and the Second Five Year Plans, social education programme witnessed the strengthening of its administrative infrastructure, the library system and the training facilities, with increased production of Audio-Visual Programmes. Central assistance was provided for the production and distribution of suitable literature to neo-literates through a centrally sponsored scheme; and central assistance was also extended to voluntary organizations for production of audio-visual aids, promotion of workers' education, development of rural radio forums and setting up of permanent adult schools on experimental basis (Mohisini, 1993, in Shah, n.d.). The Social Education Organizers at the grass-root level and a Chief Social Education Organizer at the project level were introduced as new implementation machinery, with comprehensive training support from the Social Education Organizers' Training Centres. The duration of the programme was 180 hours to be spread over 90 days, 2 hours per day on an average; the target group being of 12-40 years of age. The teacher-learner ratio was 1:30, and it was undertaken by primary school teachers. The major focus of social education programme was to develop an understanding of the way in which democracy functions and generating pride in the cultural heritage of the country through knowledge of History, Geography and Culture, teaching simple ways of personal and community health, fostering the growth of cooperative spirit, knowledge of the prevalent problems and difficulties facing the country and the world, and providing training in crafts both as a hobby and as a means to economic betterment. Besides, cultural and recreational facilities were also promoted by way of folk dances, drama, music, poetry, recitation and other ways of spontaneous self-expression through various activities like reading and discussion groups, clubs and people's colleges (Shah, 2012). The curriculum of Social Education covered

health and hygiene, Family and Community living, Vocations, Literacy and Cultural activities and Recreational activities, focusing towards the production of consciousness of citizenship and promoting social solidarity. A variety of operational strategies were developed by the States to execute the scheme in the country. An Education Caravan was introduced in Delhi, which consisted of four vans - one serving as a mobile stage, another as a moving cinema, and the remaining two were used as exhibition vans to promote social education in rural areas. The caravan toured over 300 villages, besides, also 'Educational Melas' were held. Particular emphasis was placed on recreational and cultural aspects of social education by West Bengal and Bihar, and also setting up of libraries at Madras and Bombay, and social education camps during summer vacations at Uttar Pradesh and Madhya Pradesh during 1949-50 (Government of India, 1963). The 1950s witnessed the setting up of some key national level institutions like the Literacy House (1953), National Fundamental Education Centre (1956), the National Book Trust, and the Central Board of Workers Education (1957).

The Village Literacy Movement or Gram Shikshan Mohim (1959-1963)

The 'Gram Shikshan Mohim' (Village Education Campaign) was the first successful literacy campaign undertaken in the country, post-independence, in the late 1950s. The movement was an effort to educate the village population about basic cleanliness, health and hygiene. The instructional material comprised of four sets of booklets, each set containing 10 booklets that covered information on national leaders, social reformers, major agricultural crops, civic and social matters, religious deities etc, the themes that were of direct relevance to the neo-literates. Charts, Strips, and Booklets, were also used covering common themes of economic, social and religious nature, relevant to the villagers (Saraf, 1982). The curriculum covered topics on sanitation, inculcation of healthy habits among villagers, importance of cleanliness, instructions regarding use of bathrooms, latrines, urinals, etc; child development; administration of the village; information regarding farming methods, various types of manures, and preventive measures for crop damage by diseases; acknowledging the centrality of agriculture to the village life. The follow-up of the campaign was done through circulating libraries and social education centres, to re-train the neo-literates in literacy and enrich their knowledge. The campaign, besides winning international recognition in the form of UNESCO Pahalavi Prize for literacy in 1963; was also replicated in other States of the country (Dutta, 1986; Mathew, 2013).

The Functional Literacy Programme (1968 - 1977)

The 1960s witnessed a paradigm shift, with education being held as the prime instrument for development. This shift in focus was evident in the Education Commission Report (1964-66) of India titled 'Education and National Development' which listed out 'lack of self-sufficiency in food' as a major problem thwarting development, and held that - to be worthwhile, literacy had to be functional. Literacy, thereby, assumed a significant role of educating and informing the 'illiterate' farmers about the high yielding varieties (HYV) of seeds and the details of improved agricultural practices, to tackle the issue of self-sufficiency in food. This led to the launch of the Farmers' Training and Functional Literacy project in 1967-68, with a purpose to popularize high yielding varieties of seeds through adult education. The project had three components - farmers' training, functional literacy, and farm broadcasting, which were planned in an integrated manner to improve agricultural practices (Government of India, Ministry of Education and Social Welfare, 1972). The FTFL project was conceived as a centre-based programme with an instructor learner ratio of 1:30, and a combination of methods were used in the transaction of the curriculum like - Demonstration, Practical Training, Oral Instruction, Audio-Visual Communication and Discussions. *Kisaan Saksharata - Pehli Pustak*, was the first book prepared by the Directorate of Adult

Education in this regard, using the analytic synthetic method, having 18 lessons to be covered in a period of six months. The learning material used in FTFL was region-specific and problem oriented; and was prepared as prototypes for easy adaptation to different situations, with more than 70 titles brought out in India. The farmers' training comprised of five-day training courses for selected farmers by specialists, besides also the *Charcha Mandals* (Discussion Groups), *Mahila Mandals* (Women's Groups), Tours and periodic Field Demonstrations were organized. Under Farm Broadcasting, half an hour programme on technical information was broadcasted on a daily basis by the All India Radio (AIR); while the functional literacy programme covered selected themes related to high yielding varieties of seeds and farm practices (Shah, n.d.).

The Functional Literacy Programme was spread across one year, having two phases of six months each, and each phase had 150 hours of effective teaching. The first phase - as a mass movement was largely dependent on mobilization of local resources, both personnel and financial; while the second phase was concerned with regular and systematic education of those identified at the first stage as being capable with suitable follow-up, jointly financed by the State and the local community. Detailed guidelines were prepared by the Government for the implementation of the project, which the States were obliged to follow; and the programmes were to develop in industrial and commercial undertakings, public and private, and by voluntary organizations as national or social service for learners. Also to coordinate these different programmes, a State Board of Adult Education was set up. The Farmers Functional Literacy Programme (FFLP), which was a part of the Green Revolution strategy, although did meet the set target of achieving self-sufficiency to some extent in terms of cereals, but aggravated the stratification of rural society further, due to its limited outreach, missing out the mass of the illiterate-marginal farmers and landless agricultural workers (Dutta, 1986: 67; UNDP, 1976). In the Fifth Five Year Plan, the FFLP assumed the new status of 'Rural Functional Literacy Project (1979-89)' that subsequently recorded an enrolment of 249.14 lakh adults of which however only 99.38 lakh could be made literate, while in the period of 1981-82 and 1985-86, only 16 million could be made literate of the targeted population of 110 million adults, showing considerable variations in the achievements of adult education programme. It is observed that while the Centre based programmes have been slow but steady, the literacy campaigns however have been of very short periods marked by intense activity with uncertain interruptions and then closing down eventually with modest achievements.

During the Fifth Five Year Plan (1974 - 1979), the Non- Formal Adult Education Programmes received strong support by the Central Advisory Board of Education (CABE), with particular emphasis on functional literacy for the 15-35 age group youth, to provide meaningful education especially to the weaker sections of the society who had no formal education. The programme related to the needs and aspirations of learners, conceptually a new facet of adult education; to form an indispensable link between life, work and learning. Since learners already being participants in several community work and civic activities, shouldering family responsibilities and therein reach a certain level of experience and maturity; the content of the programme was emphasized to be appropriately designed to strengthen what they possess and provide what they did not. The significant aspect of NFE was its emphasis on locally relevant and diversified content, including science (Mathew, 1990). The scheme of Functional Literacy for Adult Women (FLAW) was implemented in 1975-76, to equip the illiterate adult women with functional skills along with literacy, for promoting better awareness of health and hygiene, food and nutrition, home management and child care, civic and vocational education (Naik, 1968; Shah, 1999). Conceived as a package of services for adult women in the 15-45 years age group, the scheme was implemented jointly by Department of Education and Social Welfare in the experimental Integrated Child Development Services (ICDS) areas, to impart non-formal education and bring attitudinal change

in women to ensure their active participation in the development of the community. In States that were not covered under the FFLP, the programmes implemented by the States continued, like the programmes of Adult Education and Extension by University Departments of Adult Education, Non-Formal Education for 15-35 age group, NFE for Women, Condensed Courses for Women organized by Central Social Welfare Board (CSWB) as well as the All India Radio programmes for women and organizations of Mahila Mandal in rural areas, the Functional Literacy for Adult Women (FLAW) (Mathew, 2013). This phase of functional literacy also witnessed the establishment of key institutions like the National Board of Adult Education (1969), Directorate of Adult Education (1971), emergence of Non-Formal Education Programmes, significant efforts for integration of adult education with developmental programmes, and the launch of - *Krishi Vigyan Kendras*, Workers' Education Programme, *Nehru Yuvak Kendra*, Satellite Instructional Television Experiment (SITE), and *Shramik Vidyapeeth*. The *Shramik Vidyapeeth*, now known as the *Jan Shikshan Sansthan (JSS)*, played the role of providing integrated education and training courses for different categories of urban workers to improve their professional competency and enriching their lives (Shah, n.d.).

Media sources like radio, television, internet and other online media outlets, have been the primary means of public broadcasting in India, which being wide ranging in appeal, reliability, entertainment, instruction and information; have helped in engaging and improving communities socially, culturally and economically, through their broadcast programmes and outreach projects. Although radio was first introduced in the country in June 1923 (Sharma, 2002), followed by the setting up of a broadcasting service in July 1927 on an experimental basis at Bombay and Calcutta simultaneously; it was only after independence when the All India Radio (AIR), the radio broadcaster of India, officially known as Akashvani (since 1956), began to broadcast different programs through various stations, in more than 24 languages and 146 dialects. The Indian State Broadcasting Service (ISBS) started broadcasting educational programs on 1 April 1930 on an experimental basis at Madras, while AIR efforts in the project mode in Maharashtra and Rajasthan have been prominent. Educational broadcasting has been a potential instrument of educational advancement and an integral component of educational inputs in traditional as well as distance education and other alternative learning systems for different categories of learners (Grace, 1948; Mohanty, 1986). Although earlier there was no central planning and production of educational programmes, there has been an exception to this rule in case for about 160 programmes in English which were planned and produced in joint collaboration of AIR and Central Institute of English and Foreign Languages (CIEFL), Hyderabad. Stressing on the role and significance of Radio in education, the Report of National Workshop on Educational Broadcasting (UNESCO) has observed

> Education Broadcasting has an important role to play in Education for development. The role is more significant in the context of the situation obtaining developing societies in India which are faced on the hand with the problem as a huge percentage of literacy and heavy drop-out rates and on the other with emergent need to provide greatly increased access to education in formal and informal system of education. Educational broadcasting can become a major instrument of education as well as significant component to distance and alternative learning systems for various categories of learners. (UNESCO's Asian Programme of Educational Innovation for Development, 1981)

There were a number of Radio projects that led to the growth of educational radio in India, like the School Broadcast Project (1937) started for school students from Delhi, Bombay, Calcutta and Madras; that was gradually made curriculum-based by the All India Radio (AIR),

although it failed to make an impact due to lack of common syllabi and time tables in schools, even within the same State. Post independence, the radio program *Vividh Bharati* offered a wide range of programs including news, film, music and comedy; particularly focusing on disseminating scientific information to students and teachers. The Community Radio, which aims to contribute to the lives of the local community by creation of content by the people and for the people, focusing on the issues related to education, health, environment, agriculture, rural and community development; has helped in bringing small communities together by highlighting the common man's day-to-say concerns and realizing local aspirations. The Adult Education and Community Development Project (Radio Forum) (1956) which was an agriculture-based thirty minute radio programme on agricultural or community development, and the Farm and Home Broadcast Project (1966) that broadcasted information and advice on agricultural and allied topics, helped in educating the farmers on adopting innovative practices in farming. The University Broadcast Project (1966) endeavored to expand higher education on a wide scale, besides also including enrichment programmes on topics of public interest. Another initiative, Radio-Vision (Multimedia through Digital Radio), was a small experiment during 1975-76, in the use of radio-vision technique that was carried out by the National Council of Educational Training and Research (NCERT), in Delhi, that offered the subject matter to be presented through two channels, the Audio and the Visual. Through 'Radio-Text', Radio has been used along with textual data transfer via computer networks simultaneously to create a 'radio-text' environment while also for peer-group discussion at the receiving end after the broadcast, which indicates the variety of objectives with which the radio-text can be used (Chaudhary, 1996). The Language Learning Programme (1979-80), also known as 'Radio Pilot Project' that was started with an aim to teach Hindi to school going children as first language in 500 primary schools of Jaipur and Ajmer districts, on experimental basis, was found useful in improving the vocabulary of children. In the IGNOU-AIR Broadcast (1992), IGNOU in collaboration with AIR started radio broadcasts for the students of Open Universities. The IGNOU-AIR Interactive Radio Counseling (IRC) which started in 1998, served in bridging the gap between Institutions and learners by instantly responding to their queries and also in providing Academic Counseling in subject areas. Gyan-Vani (2001), a conventional education system, is an Educational FM Radio Channel of India for students of Open Universities that takes education to the doorsteps of the learners. A unique decentralized concept of extending mass media for education and empowerment, suited to the educational needs of the local community (Sharma, 2002); it serves as an ideal medium to address the local educational, developmental and socio-cultural needs of learners (IGNOU, 2001). In the year 2006, the Government liberalized the policy for Community Radio and decided to grant permission for setting up Community Radio Stations to 'Non-profit' organizations viz. Civil Society and Voluntary Organizations, State Agricultural Universities, Indian Council of Agricultural Research (ICAR) institutions, Krishi Vigyan Kendras, Registered Societies, Autonomous Bodies and Public Trusts registered under the Societies Act.

The emergence of Television in India has enabled unmediated access to learning, to anyone who has the access to the medium. In 1958, television found place in the furtherance of learning, when the All India Radio (AIR) received some film transcription equipments, cameras, and some equipment for their TV Studio from United States Information Services. UNESCO provided 70 Television sets for community viewing and some portable generator sets for experimenting with television in some of the villages where there was no electricity. It was on 15th Sept 1959, when the first experimental TV service was launched in India to produce and transmit social education programmes under a project by UNESCO. Television constitutes an important medium widely used for information dissemination to its viewers; has the unique feature of combining Audio and Visual Technology, and thus has been considered to be more effective than the Audio media.

The use of open telecast, telecast with printed word, telecast with print and feedback and group telecasts involve use of Educational Television along with other media in distance education for interaction, supporting learning materials and technology integration. While edutainment offers entertainment events with incidental learning opportunities through programs like Quiz Shows, Soap Opera, or Dial-in Advice Shows on issues of general interest like health, science, and commerce. Since it serves multiple purposes of entertainment, information and education, Television has been used extensively in conventional and distance education formats. 'Doordarshan' (DD), the National Television Network of India, was first started in New Delhi. Prasar Bharati, through its various major educational projects, gathered a large number of viewers and imparted education to primary, secondary and university level students through significant initiatives like - the Secondary School Television Project (1961) telecasted for improving the standard of teaching in schools within Delhi, the Delhi Agriculture Television (DATV) Project named as 'Krishi Darshan' (1966) meant for communicating agricultural information to the farmers on experimental basis, the experimental satellite communication project called Satellite Instructional Television Experiment (SITE) launched in 1975 which was meant to educate the poor masses of India on various issues via satellite broadcasting, the Indian National Satellite project (INSAT) (1982) that aimed at making the rural masses aware of the latest developments in the areas of agricultural productivity, health and hygiene, the UGC-Higher Education Television Project (HETV) (1984) that aimed to improve the quality of education among university students, the IGNOU-Doordarshan Telecast (1991) for Distance learners, and the Gyan-Darshan Educational Channel (2000), the exclusive Educational TV Channel of India which was a joint program of Ministry of Human Resource Development, Information & Broadcasting, the Prasar Bharti and IGNOU. In 1970, the Educational Technology (ET) scheme was taken up by the Ministry of Education and a Centre for Educational Technology (CET) under NCERT was set up, which was later merged with the Department of Teaching Aids of NCERT and renamed as Central Institute of Educational Technology (CIET) with an extended responsibility of undertaking educational television and radio or audio programs, conducting training and research, serving as central coordination agency for all production and utilization efforts, and conducting experiments in teleconferencing. The Indian Tele Text Service INTEXT, with its potential for delivering educational instructions, was started by the Doordarshan Delhi, on November 14, 1985. During 1986-1990, under another scheme of the Ministry that was entirely equipment driven, 2, 28,118 Radio-Cum-Cassette Players (RCCPs) and 31,129 Color Television sets were distributed to schools to promote use of audio-visual aids in education. However, this effort was limited to merely provision of equipments, and hence could not yield the desired results. Ever since Television was introduced in India, there have been various attempts to generate awareness of the functional value to special groups such as women, youth, industrial workers and students both in rural and urban areas. In 1971, under the Satellite Instructional Television Experiment (SITE), adult education programs based on general, cultural and educational value were telecast in six states in India. However, besides proving great potential in educating and reaching out to the masses in a short period of time, the use of television proved not only expensive but it was also extremely difficult to maintain the television sets in the rural areas (Uppal, Charu, n.d.). Subsequently, three pilot projects namely 'Khilti Kaliyan', 'PREAL' and 'Chauraha' attempted to use Television and Radio for teaching literacy to adults, particularly adult women. PREAL (Project in Radio Education for Adult Literacy) was an attempt to study the effectiveness of using radio lessons to enrich the learning experience of women learners in Adult Education Centres (AECs) and sustain their interest to retain and achieve the prescribed literacy norms. PREAL laid particular emphasis on reinforcement of reading ability through a planned and systematically graded reading drill inducted into every lesson that was broadcasted. Though the instructional content was in the Hindi language, attempts were made to supplement it with the spoken dialect of the particular region to enrich the programme content, vocabulary

and cultural specificity. The project though could not fetch the desired results due to the irregular functioning of the Adult Education Centres, absence of literacy instructors, irregular attendance of learners, or problems in weak batteries in the two-in-one sets, while also due to the poor organization and management of listening sessions at the AEC. Another significant initiative 'Khilti Kaliyan', a TV Serial, which focused on women in the age group of 15-35 years, was started with the dual objectives of attracting women learners to Adult Education Centres, and enriching the learning process highlighted the positive changes that literacy could make in their lives. Based on an experimental literacy primer by the same name, the serial complemented the primer, dealing with themes and issues pertaining to the lives of rural women. 'Chauraha', another ambitious project of the National Literacy Mission, attempted to teach reading and writing the Devanagari (Hindi) script, through Television, an audio-visual medium, to make learning interesting and easier to quicken the pace of learning for adult learners. It was through this project, that for the first time in India, sophisticated computer animation techniques were used to teach Hindi in a narrative storyline, in a set of 40, 15-minute TV film episodes, using graphic representation based on issues of daily life and then superimposing a letter that could be associated with it. The storyline focused on the value of education, combining direct instruction with awareness on various developmental issues in an entertaining manner. While these were all innovative initiatives and highlighted the potential of media in addressing the problem of adult literacy, these efforts were thwarted due to the lack of political and administrative commitment, inadequate planning and management effort and lack of concerted coordination at various levels (Dighe, 2010).

The National Adult Education Programme (NAEP) (1978 - 1987)

In 1977-78, Adult Education, for the first time, was put on the educational agenda of the country and made central on the development agenda when the Government accorded it due weightage along with the programme of Universalization of Elementary Education (UEE). The National Adult Education Programme (NAEP), launched on 2nd October 1978, was an extension of the National Policy Resolution (1968), to cover the entire illiterate population in the 15-35 age-group in the country within the period 1979-80 to 1983-84; with the goal of educating not just in terms of literacy, but literacy as a tool in a larger effort to create awareness (Ramachandran, 1999: 877). Influenced by Paulo Freire's writings on conscientization approach and by the deliberations of International Symposium on literacy held in Persepolis in 1975, the NAEP embraced three components - 'Literacy', in terms of reading, writing and numeracy skills; 'Functionality' that implied the improvement of skills related to the vocation and awareness; and 'Awareness' which included consciousness raising about the manner in which the poor are deprived of the benefits of the various laws and policies that are in place for them (Shah, 1980: 85). While Freire held dialogue and participation as key elements of liberating education, where the adult educators should engage illiterates in a dialogue about concrete situations, offering them instruments with which they can teach themselves to read and write; the Declaration of Persepolis considered literacy as "not just the process of learning the skills of reading, writing and arithmetic but a contribution to the liberation of man and to his full development", stressing that "the concept of functionality must be extended to include all its dimensions - political, economic, social and cultural. Just as development is not only economic growth, so literacy must aim above all to arouse in the individual a critical awareness of social reality and to enable him or her to understand, master and transform his or her destiny" (Bataille, 1976, in Shah, n.d.). Combining the dual combinations of functionality and liberation, the Government's emphasis on 're-distributive justice' was realized in 1978 to alleviate poverty and liquidate illiteracy. NAEP witnessed extensive preparations that preceded, delineating all the details of its implementation, training of personnel, preparation of teaching learning materials, etc. (Mathew, 1990). The implementing agencies of NAEP were

basically the voluntary agencies, and support was extended through State Governments in places having no universities and colleges, anganwadis of ICDS Programme, Nehru Yuvak Kendras and Panchayati Raj Institutions. Since it was held that a uniform programme in respect of adult education was inconceivable; the NAEP, in design, was to combine the learning components in the various adult education programmes, including agriculture, health and hygiene and family planning, cooperatives and credit, etc., by harnessing the cooperation of the extension functionaries of those departments. Similar decision was taken up with respect to pedagogy. As for content, a catalogue of Literacy and Post-Literacy Materials which was brought out by the DAE, New Delhi in 1978, along with the actual materials and the materials developed by State Resource Centre (SRC) for NAEP, were all displayed in an exhibition that was especially organized for this purpose at the launch of NAEP; on premise of the guidelines that the implementing agencies of NAEP could adopt or adapt, or prepare new materials based on those already available. The idea of using the already available curriculum and content of the conventional adult education programmes in NAEP, irrespective of the society it envisioned and intended to fashion, may be seen as a weak case, as also suggested by the dearth of literature on the curriculum and contents transacted in the Adult Education Centres (Bordia, 1982: 27, 32; Mathew, 2013). However, the NAEP, unlike the Farmers Functional Literacy Programme, involved greater participation of voluntary agencies in a host of activities ranging from running the centres, developing learning materials, providing training and taking up research and evaluation instead of working as a sole government initiative (Bordia and Kaul, 1992). It was conceived in a project pattern, with adult education centres functioning as grassroots level units and each of them catering to 25-30 learners. The programme duration was initially spread over 10 months (300-500 hours), which was later extended to three years after being revised into the Adult Education Programme in 1980 that was operationalized in three stages - first, of basic literacy (300-500 hours duration) that included basic literacy, numeracy, knowledge about health, family life, vocations related to learners background and laws relevant for family life. While the second and third stages (150-100 hours respectively) comprised reinforcement of literacy and improvement of vocational studies. Later the programme duration was reduced to two years. Some of the significant achievements of NAEP were the high level of participation of women, Scheduled Castes, Scheduled Tribes, involvement of voluntary agencies, and strengthening up of the resource base of adult education by setting up of the State Resource Centres (Bordia, 1982). The 1980s also witnessed the expansion of University Adult Education in India when universities were provided grants to take up adult education, continuing education and extension activities; besides, with the launch of Mass Programme of Functional Literacy in 1986, the scope for participation of students from schools and colleges increased tremendously. Though, being traditional, honorarium-based, hierarchical and government-funded and controlled, NAEP was not very successful despite concerted efforts, as more emphasis was needed to be given in educating the oppressed, depressed and the backward sections, especially women; developing functionality besides imparting literacy skills, emphasis on conscientization, formation of the organization of the poor and building of learning-cum-action groups (Govt. of India, 1977; Shah and Bhan, n.d.). In the 1980s, literacy was once again emphasized as an essential precondition for meaningful participation of the masses in the process of political decision making and national reconstruction (MOE, 1985).

It is observed that the periodic institutional changes owing to the changing Government policies, envisaging adult education as short-term plan projects instead of an ongoing activity, suggest the absence of a long-term vision in institutional development of Indian Adult Education. In the 1950s, the National Fundamental Education Centre, a national level institution, various Janta Colleges and a number of regional Training Centres for Social Education officers were set up, though for a short period, which declined due to the change in the policy of the Government. The

National Fundamental Education Centre was discontinued due to the lack of efforts to develop it into a full-fledged national institution for strengthening the professional base of Indian Adult Education. The absence of special institutions during 1960-80 was one of the reasons which further attributed to the slow pace in the growth of adult education during the period. The 1980s though witnessed a change in the trend when several State Resource Centers (SRCs) were set up and Adult Education Departments in various Universities were established. In 1950s, with a focus on the Social Education Programme, several administrative infrastructures were developed by the State Governments which were later dismantled with the termination of the programme. A National Institute of Adult Education was established in 1991 for undertaking research, training and publications at the national level which closed down as yet another short term activity.

The present system of education, which follows the National Policy of Education, 1986 (as modified in 1992), considers Life-Long Education as the cherished goal of the educational process; stressing that universal literacy and the provision of opportunities for young people, housewives, agricultural and industrial workers and professionals should continue and they have a liberty to have the education of their choice at the pace suited to them (Government of India, 1992). The National Policy on Education (1986) states that

> comprehensive programmes of post-literacy and continuing education will be provided for neo-literates and youth, who have received primary education, with a view to enabling them to retain and upgrade their literacy skills, and to harness it for the improvement of their living and working condition.

The NPE stressing on the importance of literacy, envisaged adult education to be a means for reducing social, economic and gender disparities and the nation to together assume a collective responsibility for providing resource support for the same (MHRD, 1986: 9-10). The Programme of Action (NPE, 1986), regarding the implementation strategies to be adopted, therefore, recommended that "Emphasis on adult education programme should be on skill development and creation of awareness among the learners of the national goals, of development programmes and for liberation from oppression."

Programmes of the National Literacy Mission (NLM) (1988 - onwards)

The NPE's Programme of Action (MHRD, 1986: 130) proposed that eradication of illiteracy be treated with a sense of urgency, and therefore to be made a "mission". In 1988, the National Literacy Mission (NLM) was launched by the Government of India in pursuance of the National Policy on Education (1986) with the mission to accelerate the pace of providing literacy skills to the adult illiterates in the age group 15-35 in their mother tongue, with political and policy support, for enhancing the adult education programme in the country. The National Literacy Mission Authority (NLMA), an autonomous wing of the Ministry of Human Resource Development (MHRD), was set up as the nodal agency for overall planning and management and funding of Adult Education Programmes and institutions at the national level. Besides, training of functionaries, and monitoring and evaluation of literacy programmes, programmes conducted by State Resource Centers and Jan Shikshan Sansthans has also been an important responsibility of NLM. The necessary technical and resource support provided by the Directorate of Adult Education (DAE) to the NLMA, primarily in the production of prototype teaching learning materials including all kinds of media for furtherance of the objectives of NLM. The National Literacy Mission (NLM) targeted to bring non-literates to a level of self-reliance in the three R's (Reading, Writing, and Arithmetic), and also stressed on the provision of facilities for skill development to improve the economic status and well-being, and making people aware of the causes of deprivation and

facilitate their participation in the development process through amelioration of those conditions (DAE, MHRD 1999: 23). Therefore, by enlightening individuals to be socially conscious and lead productive life, Functional Literacy assumed the form of "Developmental literacy", covering thereby aspects of all round development of human beings and the national concerns, for the development of nation as a whole (Government of India, 1988). The campaign approach adopted used some very novel strategies of mobilization and environment building to create a favorable public opinion, and to generate volunteers or 'instructors'. The campaign also worked towards decentralization, witnessing eventually a marked shift from the government controlled, 'inspectorial system' to a more people friendly, community based system; with the creation of structures like - the Zilla Saksharta Samities (ZSS) and Village Education Committees (VEC), which blended well with the new role of the Panchayati Raj Institutions (PRI) (Ghosh, 2000:7). There was also an increased participation of women and underprivileged communities, an increase in the enrolment in primary schools, and a growing desire for literacy in areas where the literacy campaigns were implemented effectively (Banerjee, 1993). An experiment in mass literacy campaign spearheaded by a Non-Government Organization in Kerala, the *Kerala Shastra Sahitya Parishad*, in Ernakulum District in 1989, with the aim to make the entire district fully literate within one year period, was extremely successful and had a snowballing effect with similar campaigns being launched in succession in the country. The campaign approach was marked with large scale mobilization through multi-faceted communication strategy using traditional folk culture; and was implemented in a time-bound, volunteer based and cost effective manner with active cooperation of the district administration and the society. The curriculum laid emphasis on literacy and numeracy as well as simultaneous improvement of the quality of life of learners. A Primer was designed that focused on drawing attention to, and the amelioration of the disadvantaged position of people. Competitions in various artistic forms were conducted for learners to encourage and develop their talents through group songs, mono act play, quiz, fancy dress, rural art, etc and to sustain their interest and enthusiasm further, excursions and study tours were conducted. The cultural programs of learners were recorded by Radio and Television stations to motivate the learners to actively participate in the programs of the literacy centres. The Total Literacy Project of Ernakulum brought about great cultural rejuvenation, promising phenomenal changes in the attitude, behaviour and lifestyle of a large section of the society (Joseph, 1996). After this successful experiment, the Total Literacy Campaign (TLC) was adopted by NLM as the principal strategy for eradication of illiteracy in the country. The NLM succeeded in achieving significant success in its mission through the TLCs (Daswani, 1999); since besides imparting functional literacy, the campaign also aided in disseminating a 'basket' of other socially relevant messages. Besides, the Rural Functional Literacy programme (RFLP) was supported in areas that were sparsely populated and hilly where it was not possible to adopt the campaign mode. The Rural Functional Literacy programme was a centre based programme, in which literacy was imparted to 20-30 adult learners by an instructor, for 200 hours spread over a period of one year (Shah, n.d.). Although the TLCs were successful in generating a positive climate for adult literacy, the goal of 'total literacy' could not be achieved uniformly; hence Post Literacy Campaigns (PLCs) were started to follow up the TLCs, to ensure stable literacy skills among the TLC participants (Daswani, 2002). Subsequently, the Continuing Education Centers (CECs) were set up by the NLM in 1995 (revised in 1999), to provide a platform for Lifelong Learning for those who had acquired literacy skills through the TLC and PLC stages. The CECs were set up for a population of 2000-2500; and conceived as an institutional mechanism, it provided a range of basic literacy, post literacy and target specific programmes covering equivalency, income generation, special interest and skill-oriented programmes. For every 8-10 CECs, one Centre was designated as nodal CEC whose functionaries were responsible for the overall monitoring and supervision of the Centres; and each Centre managed by two part time functionaries, *Prerak* (facilitator) and an

Assistant *Prerak*. In the year 1999, the Government in its attempt to have an integrated approach to literacy, combined the Total Literacy Campaigns and the Post Literacy Campaigns under one literacy project "Literacy Campaigns and Operation Restoration" to tackle the enormous illiteracy problem in a holistic and goal-directed manner. Eventually, the NLM envisaged continuing literacy campaigns in areas still having 'large pools of residual illiteracy'; while for those who had crossed the basic learning phase, were to have programmes of consolidation, remediation, vocational skills, integration with life skills and such other aspects as the basic unit.

Computer literacy was visualized as one of the components in the programmes of the CECs by National Literacy Mission to enable 'neo-literates' to acquire computer literacy skills. Various computer based learning programmes were developed that made use of ICT in educating adult learners. 'TARA Akshar - *Angoothe Se Kalam Tak*', a laptop based functional literacy programme made use of ICT in training learners to read and write and do basic mathematical calculations in 98 hours, through a 2 hour period over 49 days. The software in the programme used a combination of Advanced Memory Techniques like memory hooks through animated movies, with strong learning reinforcement mechanisms using rapid-fire video gaming concepts, and a technique that teach the letter sound first and then sounds are blended together to achieve pronunciation of whole words. Although, the effort had been recent, the programme has been successful in addressing the literacy needs of over 57000 women across seven of the most severely affected northern states of the country, where more than 97% learners have become literate. Currently it is being run in Bundelkhand in Uttar Pradesh and Madhya Pradesh with support from agencies like Connect for Change, UNDP, and in Rajasthan with the support from State Resource Centre (SRC), Jaipur (Dighe, 2010). The ICT-NFE Project launched by APPEAL in 2002 was a pilot initiative that made use of ICT to help improve quality of life, alleviate poverty and achieve community development through community based mechanisms such as Community Learning Centres (CLCs). The project also helped in fostering the participation of disadvantaged communities in literacy, basic education and continuing education activities in some countries of the Asia-pacific region. The TCS Computer Based Functional Literacy Programme (CBFL), a computer-based functional literacy programme designed by TCS (Tata Consultancy services), was developed based on the material prescribed by NLM that made use of animated graphics and a voice over in explaining how individual alphabets combine to give structure and meaning to various words. The Computer Based Functional Literacy Programme (CBFL) used puppets as the motif in the teaching process, where the lessons were tailored to fit different languages and even different dialects. With more emphasis on words rather than alphabets, the programme addressed the thought processes of the learners; focusing on reading, theories of cognition, language and communication so that these words can be taught at a faster pace. The 'Bridges to the Future Initiative' (BFI), operational in the poorest states of India including Andhra Pradesh since 2003, for the disadvantaged youth in the 9-20 years age group; takes advantage of the already existing ICT infrastructure (largely in secondary schools), and creates content which the out of school youth can access. The instructional model builds on the oral competence of learners in their mother tongue, Telugu. An impact assessment of BFI indicated that the initiative has resulted in an increased pace in learning literacy skills, with enhanced motivation and retention, and many of the participants of this programme have shown significant gain in performance, and even returned back to complete their primary schooling. The initiative therefore offers a cost-effective solution that can be implemented in challenging situations. Another initiative, the H. P. Literacy Testing Solutions (2004), a literacy testing tool, targeted to achieve Total Literacy through a functional literacy-testing module that could test Adult Literacy Skills using a touch screen with a simplified interface in the local language. This testing module helped in monitoring the progress of various literacy programmes, wherein an adult learner could register their name in the system which in turn provided them

with an identification number that could be used for future reference. This multimedia has served as an interactive device suitable to the use of adult learners in testing their reading skills. The Computer Based Literacy Primer (CBLP) named 'Computer Akshara Vachakam', developed by the State Resource Centre, Hyderabad (2007) is an interactive learning package with multimedia inputs to enable learners to learn the basic functional literacy skills of reading, writing, numeracy and general awareness through the instructor. The Primer uses the content approved by the National Literacy Mission, wherein the instructor demonstrates content displayed on screen and learners are required to learn the operation to be able to complete the tests and exercises with the guidance of the instructor. The Computer Based Literacy testing tool (CBLTT) (2008), a user-friendly testing tool especially suitable for neo-literates, was developed in accordance with the Evaluation Guidelines recommended by the R.H. Dave Committee, National Literacy Mission. This on-line achievement test battery assesses the literacy skills of learners in terms of reading, writing and numeracy, including both formative and summative evaluation of literacy skills of adult learners. These initiatives have been significant in making use of ICT in promoting literacy; however, various infrastructural problems have been reported like scarcity of sufficient computers in many places, with little or no provision for maintenance and repair (Daswani, 2010).

The NLM also promoted the creation of innovative teaching-learning materials to enable learners to pitch in with their own voices, needs, preferences and experiences. Notable example is the 'Mahila Samakhya' Programme in the Banda district (UP), where the women trainers not only articulated their own needs to decide the content of the materials but also participated in issues of language editing, forms of writing, content lay-out, etc.; taking ownership of the final outcome. The Programme also responded to the issues of caste, class and gender faced by women by incorporating them as part of the training itself. Role-plays and other exercises were employed to help the women open up and feel comfortable in each others' presence. The underlying objective being to help women achieve a gender perspective in their own lives which could subsequently be shared with others (Nirantar, 1997: 45); which is an aspect almost missing in most of the training materials where patriarchy and gender differences have been reinforced (DAE: 1999; Ahmad, 2015a). The National Literacy Mission, was conferred the 'Noma Literacy Prize' in 1999, by UNESCO, in appreciation for the teaching material that it had produced and for raising awareness of quality primary education in schools.

Marking literacy as an important component of human resource development, a need for strengthening the training in functional skills relevant to economic activities was stated in the Seventh Five Year Plan (1985-1990), to meet the huge target of illiterates, adopting the strategy of a mass movement. Also, particular emphasis was placed on the improvement and strengthening of the Library systems at the national level to have their support in the development of literature for neo-literates. States with an advanced library system and rural libraries were made the focal points for post-literacy and continuing education programs. Translation of important books into various Indian languages, and publication of books for neo-literates was also done; with provisions of assistance to the publishers, voluntary agencies and the school library program, under the "Operation Blackboard" Scheme. Post literacy learning strategies as developed by NLM extended learning opportunities both in structured and unstructured situation, wherein structured situation implied organized learning with Primers or Graded Textual Material as well as suitably designed supplementary reading books for neo-literates; while unstructured situations referred to widely differing literacy abilities necessitating the provision of a wide range of learning materials and tools ranging from wall-newspapers to book corners or libraries. Various other media like Radio and Television, along with local art forms, study tours and excursions were used. The State Resource Centers (SRCs) served as catalytic agents in adult education in the country. The

Ninth Five Year Plan (1997-2002) and the Tenth Five Year Plan (2002-2007) period witnessed significant efforts in the strengthening of adult education with the decentralized and disaggregated planning and implementation of literacy, post-literacy and continuing education programmes, to achieve universal literacy (Shah, 1999). Also greater participation of social groups was ensured with the introduction of residual literacy for individuals suffering from other social handicaps in addition to 'illiteracy'; focusing on their immediate needs and problems and to the adoption of specific measures to suit their requirements. Thus catering to the difficult segments of the population, the plan targeted all the left-over districts and marginalized sections of the society. The National Literacy Mission made 127.45 million persons literate by the end of the Tenth Plan Period (2002-2007), of which 60% were females. To further boost 'Adult Education and Skill Development', the Government introduced two new schemes, 'Saakshar Bharat' a centrally-sponsored scheme, and the 'Scheme for Support to Voluntary Agencies for Adult Education and Skill Development' during the Eleventh Five Year Plan. Significant measures were also taken to strengthen partnership with Non-Governmental Organizations (NGOs) and to evolve both institutional and informal mechanisms to give voluntary organizations active promotional role in the literacy movement. The NPE (1986) stipulated that non-governmental and voluntary organization (including social activist groups), be encouraged and financial assistance be provided to them, subject to proper management, with a genuine partnership between the Government and Non-Governmental Organization (NGOs), ensuring a wider involvement of NGOs in adult education. The Non-Government Organizations, as a third sector institutional framework, have proved crucial in providing strong support to the development issues; considerably declining the role of state in social welfare services (Ahmad, 2015b; Aurora et al., 1994; Rajendran, 2003). The National Literacy Mission, recognizing the vast potential of NGOs in furthering its programmes and schemes, has taken measures to strengthen its partnership with NGOs; which are now required to take up area-specific Continuing Education Programmes for Life-Long Learning, including skill-development programmes for personal, social and occupational development. The Scheme of Assistance to Voluntary Agencies in the field of Adult Education was started in the First Five Year Plan and continued with expanded scope in the subsequent Plans, for furtherance of the objectives of the National Literacy Mission.

In the Eleventh Five Year Plan (2007-2012), adult education witnessed a significant shift from the earlier sequential and fragmented approach of basic literacy; and areas that were educationally deprived and isolated were to be provided specially trained instructors; and with this, young adults and adolescents who lost the opportunity for formal schooling were given a second opportunity to complete their education. With regard to Continuing and Lifelong Education, 'literacy' was stressed to be combined with skills for enhancement of livelihood security; synergized with the determinants of good health; incorporated with political empowerment, particularly of women elected to local self governments; reinforced and augmented for Right to Information for an informed citizenry; and also be "intrinsically linked with Universalization of elementary education of equitable quality" (Matheswaran and Daphne, 2011; Shah, 1999).

However, some of the complex challenges before NLM have been the sheer magnitude of literacy with over 100 million illiterates in the 15-35 years age group, and the persistent flow of the unreached, un-enrolled and the dropouts from the primary stage of the mission back into the status of 'adult illiterates' that kept the target of the mission nearly unaffected. Besides, also the multiple and interlinked forms of socio-economic deprivations and discriminations along differences of gender, social and regional boundaries that have hindered literacy and eventually development in the country. Covering the non-literate poor in rural areas and urban slums has been equally a daunting task, therefore besides achieving functional literacy, NLM was entrusted with the objec-

tives of inculcating critical consciousness about the causes of deprivation, to organize neo-literates for ameliorating their deprivations through participation in development; promoting imbibitions of the values of national integration, women's equality, observation of small family norms, conservation of environment and inculcation of scientific temper. Despite significant accomplishments of the Mission, illiteracy continues to be an area of national concern with a significant population still struggling. Additionally, exclusion in terms of gender, social and regional disparities in literacy also continues unchanged. To confront the visible and hidden challenges of illiteracy and the socio-economic deprivations facing the illiterates has been the major challenge under the aegis of the National Literacy Mission, in addressing the issue of illiteracy in the country. Adult Education, therefore, is indispensable because it could aid in supplementing the efforts to enhance and sustain literacy levels through formal education.

Conclusion

Adult learning is a complex process. Understanding adult learning is just as complex, since it implies moving beyond examinations of learning as a de-contextualized process to justify the meanings of and motivations for learning in adults, particularly their perspective, concepts on self-direction, reflection, autonomy, problem-solving or transformation. While 'learning' is the acquisition of knowledge; learning and knowing together form an 'experience'. To learn, therefore implies gaining knowledge through experience; and hence for adults it is intrinsically related to their real life, real problems and real issues, and needs to be understood as such within the larger milieu, for literacy to be meaningful, relevant and effective. Learning is easier for adults when information is practically presented to them in a way that helps them to construct meaning based on their own understanding and reservoir of experiences; since the brain seeks meaningful patterns and interprets new experiences through what is familiar. Retaining learner motivation in learning through need-based strategies is therefore essential, since it is the key to sustain active participation, and for deciding the direction, persistence, intensity and quality of learning behaviour of adult learners. Adult education in India has witnessed significant development; but also periodic institutional changes owing to the changing government policies envisaging adult education as short-term plan projects instead of an ongoing activity, which suggests the absence of a long-term vision in Indian adult education for it to have sustainable efforts in instructional design and delivery. Within this backdrop, in a diverse and developing country like India, concerted efforts need to be channelized with a long-term strategy, and with increased involvement and participation of adult learners at all levels of planning and implementation, in a need-based and context-specific manner to address the pedagogical issues in adult education and assist adult learners in taking ownership of the outcome by choosing what, where and how to learn in a purposeful way.

References

Acharya, P. (1988): "Is Macaulay still our guru", in: *Economic and Political Weekly (EPW)*, 23 (22), pp.1124-1130.

Ahmad, F. K. (2015a): "Gender Inequality in Education in the Scheduled Castes", in: Karbhari, D. and L. Kumar (eds.) *Status of Scheduled Caste's Higher Education in India*, Indore: Shree Parasmani Publication, pp. 71-94.

Ahmad, F. K. (2015b): "Challenging Exclusion: Issues and Concerns in Inclusive

Education in India", in: *Researchpaedia*, 2 (1), pp. 15-32.

Ahmad, F. K. (2015c): "Use of Assistive Technology in Inclusive Education: Making Room for Diverse Learning Needs", in: *Transcience: A Journal of Global Studies*, 6 (2), pp. 62-77.

Ahmed, M. A. (1987): *System of Education in Medieval India*, New Delhi: Panchsheel Publishers.

Altekar, A. S. (1944): *Education in Ancient India*, Varanasi: National.

Amadi, R. (2002): "Harnessing Educational Resources in the teaching of history of sustainable development", in: *Journal of Teacher Education* (1), pp. 140-141.

Anowor, O. O. (1986): "Adult Education in the Context of Lifelong Education", in: A. B. Oduaran and B. A. Eheazi (eds.), *Issues in Adult and Community Education NNCAE*.

Anowor, O. O., J. O. Ezema and N. Umezulike (2001): *Fundamentals of Adult Education: A Handbook for Facilitators of Learning*, Enugu: ECTA Nigeria Ltd.

Ashcroft, B., G. Griffiths and H. Tiffin (2007): *Post-Colonial Studies: The Key Concepts*, 2nd ed., London and New York: Routledge.

Banerjee, S. (1993): "Revisiting the National Literacy Mission", in: *EPW*, 28 (25), pp. 1274-1278.

Bataille, L. (1976): *A Turning Point for Literacy*, New York: Pergamon Press.

Bates A. W. (1981): "Some unique characteristics of television and some implications for teaching and learning", in: *Journal of Educational Television*, 7 (3), pp. 79-86.

Bates, A. W. (1983): "Adult learning from Educational Television: The Open University experience", in: M. J. A. Howe (ed.), *Learning from television: Psychological and educational research*, London: Academic Press, pp. 57-77.

Bordia, A. (1981): "The National Adult Education Programme: Background and Prospects", in: Shah, A. B. and S. Bhan (eds.), *Non-Formal Education and the NAEP*, pp. 57-90.

Bordia, A. (1982): *Planning and Administration of National Literacy Programme: The Indian Experience*, Paris: IIEP.

Bordia, A. and A. Kaul (1992): "Literacy efforts in India", in: *The Annals of the American Academy of Political and Social Science*, 520 (1), pp. 151-162.

Chaudhary, S. S. (1996): *Current Trends, Methods and Technologies in Distance Education for Primary School Teachers*, a working paper for Commonwealth of Learning, Vanouver.

Chakravarty, A. (ed.) (1961): *A Tagore Reader*, USA: Beacon Press.

Cipolla, C. M. (1969): *Literacy and Development in the West*, London: Penguin Books.

Cranton, P. (1994): *Understanding and Promoting Transformative Learning*, San Francisco: Jossey-Bass.

DAE (1999): *Handbook for Preraks*, New Delhi: MHRD, Govt. of India.

Dangwal, K. L. (2013): *Radio for Equitable Education to Rural Girls.* University News, 51 (34).

Daswani, C. J. (1999): "Adult Literacy in India: Assumptions and Implications", in: Wagner, D. A., R. L. Venezky and B. V. Street (eds.), *Literacy: An International Handbook Boulder*, CO: Westview Press.

Daswani, C. J. (2002): "Education Beyond Literacy: Changing Concepts and Shifting Goals", in: Govinda, R. (ed.), *Indian Education Report: A Profile of Basic Education*, New Delhi: Oxford University Press, pp. 233-241.

Daswani, C. J. (2010): "ICT in Literacy Education", in: *Indian Journal of Adult Education*, New Delhi.

Dharampal (1983): *The Beautiful Tree*, Coimbatore: Biblia Impex.

Dharampal (2000): *Collected Writings The Beautiful Tree*, Goa: Other India Press.

Dighe, A. (2010): "Use of ICTs in Literacy", in: *Indian Journal of Adult Education*, New Delhi.

Duffy, G. G. and L. R. Roehler (1989): "Why strategy instruction is so difficult and what we need to do about it", in: McCormick et al. (eds.) *Cognitive Strategy Research: From Basic Research to Educational Applications*, New York: Springer-Verlag.

Dutta, S. C. (1986): "History of Adult Education in India", in: *Indian Journal of Adult Education, (IAEA)*, New Delhi.

Dutta, K. and A. Robinson (ed.) (1997): *Selected Letters of Rabindranath Tagore*, Cambridge: Cambridge University Press.

Ekwensi, F., J. Moranski and M. Townsend-Sweet (2006): "E-Learning Concepts and Techniques", in: *5.1 Instructional Strategies for Online Learning*, Bloomsburg University of Pennsylvania's Department of Instructional Technology.

Freire, P. (1972): *Pedagogy of the Oppressed*, Harmondsworth: Penguin Books.

Ghosh, A. (2000): "Role of media in education", in: *Year 2000 Assessment: Education for All*, New Delhi: NIEPA.

Ghosh, A. (2006): *Communication Technology and Human Development: Recent Experiences in the Indian Social Sector*, New Delhi: Sage.

Glick, J. A. (1992): "Werner's Relevance for Contemporary Developmental Psychol-

ogy", in: *American Psychological Association, Inc.: Developmental Psychology*, 28 (4), pp. 558-565.

Government of India (1940): *The Proceedings of the 5th Meeting of the CABE in India held in May, 1940, Appendix II*, Delhi: Govt. of India Press.

Government of India (1977): National Board of Adult Education: *Draft Policy Statement on Adult Education*.

Hargreaves, D. H. (2004): *Learning for Life – The Foundation of Lifelong Learning*, Bristol: The Policy Press, UK.

Hilgard, E. R. and G. H. Bower (1977): *Theories of Learning*, 4th ed., New Delhi: Prentice Hall of India.

Hudson, J. W. (1851): *The History of Adult Education*, London: Longman & Brown.

Hull, R. (1962): *A note on the history behind ETV Educational television: The next ten years*, Stanford CA: Institute for Communication Research.

IGNOU (2000): *Course ES-318: Communication Technology for Distance Education, Post Graduate Diploma in Distance Education programme*, New Delhi: IGNOU.

Jameela, T. (2013): "Instructional Aids and Techniques in India: From pictographs to e-learning", in: *Excellence International Journal of Education and Research Commonwealth Association for Education, Administration and Management*, 1 (3).

Johnstone, B. and D. Carlson (1998): "History of Electronic Publishing", available at: http://www.iml_jou_ulf_edu.

Joseph, P. J. (1996): "The Total Literacy Project of Ernakulum: An Epoch-making Experiment in India", in: *Convergence Volume*, XXIX (1).

Laubach, F. (1940): *India Shall Be Literate*, Jubbalpore: National Christian Council of India.

Lestage, A. (1959): *The Use of Audio-Visual Aids in Education*, UNESCO Chronicle.

Lessard-Clouston, M. (1998): "Vocabulary Learning Strategies for Specialized Vocabulary Acquisition: A Case Study", paper presented at the *3rd Pacific Second Language Research Forum (PacSLRF '98)* at Aoyama Gakuin University, Tokyo.

Matheswaran, V. P. and R. Daphne (2011): "Policies Governing Adult ad Continuing Education in Five Year Plans – An Overview", in: *Indian Journal of Adult Education*, New Delhi.

Mathew, A. (1990): *Ministry of Education: An Organization History*, New Delhi: NIEPA.

Mathew, A. (2012): "International Benchmarks and Evolving Perspectives in Indian Adult Education", in: *Indian Journal of Adult Education*, 73 (1).

Mathew, A. (2013): "Conceptual Evolution of Adult Education in India and Correspondence with Global Trends", in: *Indian Journal of Adult Education*, 74 (1).

McKeachie, W. J., P. R. Pintrich, Y. Lin and D. A. Smith (1987): *Teaching and Learning in the College Classroom: A review of the research literature*, University of Michigan: NCRIPTAL.

MHRD (1986): *National Policy on Education*, New Delhi: Govt. of India.

MHRD (2011): *Saakshar Bharat Mission*, Govt. of India.

Mohisini, S. R. (1993): *History of Adult Education in India*, New Delhi: Anmol Publication.

Mookherji, R. K. (1951): *Ancient Indian Education*, London: Macmillan.

Naik, J. P. (1968): *Education in the Fourth Plan*, Bombay: Nachiketa.

Nayar, D. P (1989): *Towards a National System of Education*, New Delhi: Mittal Publications.

NCAM (2002): "International Captioning Project, History of Tele-text", available at: http://www.ncam.wgbh.org.

Nicholls, G. (2000): *Learning to teach*, Glasgow: Bell and Bain LTD, pp. 356-360.

Nirantar (1997): "Innovating for change: women's education for empowerment", in: Papen (ed.), *Making a Difference: Innovations in Adult Education*, Paris: UNESCO.

O'Malley, J. M. and A. Chamot (1990): *Learning Strategies in Second Language Acquisition*, Cambridge: Cambridge University Press.

Paterson, R. W. K. (1979): *Values, Education and the Adult*, London: Routledge and Kegan Paul.

Paul, N. (1968): *School Television in India*, New Delhi: All India Radio.

Patwardan, C. N. (1939): *History of Education in Medieval India*, Bombay: The Author.

Radhakrishnan (1999): *Indian Philosophy*, Oxford: Oxford India paperbacks.

Ramachandran, V. (1999): "Adult Education: a tale of empowerment denied", in: *EPW*, 34 (15).

Raw, V. K. (2003): *Quality teaching*, New Delhi: APH Publishing Corporation, pp. 36-39.

Rubin, J. (1975): "What the 'good language learner' can teach us", in: *TESOL Quarterly*, 9 (1), pp. 41-51.

Saraf, S. N. (1982): *Literacy in a Non-Literacy Milieu: The Indian Scenario*, Paris:

IIEP.

Satyanarayana, P. and C. Sesharatnam (2000): *Distance Education: What? Why? How?*, Hyderabad: Booklinks Corporation, pp: 95-96.

Schmeck, R. R. (1988): "Individual differences and learning strategies", in: Weinstein, C. , E. Goetz and P. Alexander, (eds.), *Learning and Study Strategies: Issues in Assessment, Instruction, and Evaluation San Diego*, CA: Academic Press, pp. 171-191.

Shah, A. B. (1980): "The NAEP: social and political in tensions", in: Shah, A. B. and S. Shah (eds.), *Non-formal education and the NAEP*, New Delhi: Oxford University Press.

Shah, A. B. and S. Bhan (eds.) (1980): *Non-Formal Education and NAEP*, New Delhi: Oxford University Press, p. 85.

Shah, S. Y. (1999) (ed.): *An Encyclopedia of Indian Adult Education*, New Delhi: National Literacy Mission.

Shah, S. Y. (1999): *Studies in Indian Adult Education*, New Delhi: Indian Association of Adult Education (IAEA).

Shah, S. Y. (2010): "Teaching and Training in Adult and Lifelong Learning in India: Need for Professionalization", in: *Indian Journal of Adult Education*, Special Issue 71 (4).

Shah, S. Y. (2012): "Adult Education in India: A Historical Perspective", in: *Two Decades of National Literacy Mission: Some Perspectives*, New Delhi: IAEA, pp. 1-21.

Shah, S. Y. (n.d.): *Indian Adult Education: A Historical Perspective*, eGyanKosh.

Siddaraju, V. G. (2011): "Role of Non-Governmental Organizations in promoting sustainable agriculture development in Karnataka", in: *International NGO Journal*, 6 (2).

Singh, S. (1957): *History of Adult Education during British Period*, Delhi: IAEA.

Smith, M. K. (2002): "Malcolm Knowles, informal adult education and andragogy", in: *The Encyclopedia of Informal Education.*

Stern, H. H. (1975): "What can we learn from the good language learner?", in: *Canadian Modern Language Review*, 31, pp. 304-318.

Umezuruike, N. A. (1996): "Strategies for sustaining programme activities", paper presented at a two day in service training workshop for co-coordinators, June 6-7.

UNDP (1976): "India Country Profile", in: *The Experimental World Literacy Programmes – Critical Assessment*, Paris: UNESCO.

UNESCO (1950): *Records of the General Conference. Resolutions adopted on the re-*

port of the Programme and Budget Commission and of the Joint Commission- Programme and Budget, Official and External Relations. Second Part: Preamble. Education, resolution 5C/II.II.A, Florence, p.17.

UNESCO (1982): *Report of Study Group Meeting on Applicability of Advanced Technologies to Educational Development*, Paris: UNESCO, pp. 20-24.

Vivekananda, S. (1968): *The Complete Works of Swami Vivekananda*, Calcutta: Advaida Ashram.

Wagner, D. (ed.) (2005): *Monitoring and Evaluation of ICT in Education Projects: A Handbook for Developing Countries*, Washington, DC: infoDev/World Bank, p. 96.

White, G. (1948): *The Value of Audio-Visual Aids in the Teaching of Social Studies: A Project Using Visual Aids in the Teaching of Social Studies to Latin American children in the Fifth Grade*, Florida Southern College.

World Bank (2003): *Lifelong Learning in the Global Knowledge Economy: Challenges for Developing Countries.* A World Bank Report.

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