CHAPTER I

INTRODUCTION
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Education has long been viewed as a vehicle of social change. Social scientists considered it as an active catalytic factor in bringing around socioeconomic transformation in the society. Our history is replete with rich educational heritage right from Vedas down to Upnishadas, Smiritis, Dharam Sangatas, Dharam Sutras and the epics, which have not only guided but moulded and shaped the destinies of our rich oriental civilisation. It is also reflected not only in rich gurukula traditions but also in the seats of higher learning of the ancient universities like Nalanda, Takshila etc. It is but natural that we have inherited the great intellectual legacy and have also mastered the arts of other branches of knowledge. be it medicine or the psycho-physiological control of the mechanism of human body.

The occidental civilisation made its impact with the advent of Britishers and we were exposed to a different complexion of education which was western in ethos and almost foreign to us. We were quick to grab the opportunity thrown by the Britishers and made a virtue out of the sinister British design. There can be no two opinion regarding the
fact that the industrial revolution which originated in Britain and later on enveloped the entire world in its grip had its beginning in the western education system. Though the Britishers introduced industrialization and western education system in all their colonies including India for their own ulterior ends, but nonetheless the consequences in the form of a developed infra-structural base which is a prerequisite for today's modern competitive world, was inherited by us from the Britishers. In this sense the Britishers are credited with initiating and introducing here the networking of railways, motor car, development of portes, communication, schools and universities and other essential and relevant industries into this sub continent. Along with this, we were also exposed to an whole array of attendant concepts viz. egalatirainism, secularism, fraternity, liberty and democracy. So when the Britishers left we were in a position to expand the educational as well as industrial network for the overall growth and development of our sociocultural milieu.

The post independent period saw radical transformation taking place in the industrial, educational and political spheres. In industry, the Nehru's vision of self reliance and democracy with a socialistic pattern of society paid rich dividend in the later decades. We are now sort of poised to leap-frog with the international giants in technology and in the
education field, with all the ups and downs of last 50 years. We have come a long way in terms of having the largest skilled man power anywhere in the world, and we are also ranked pretty high in the sphere of technology. This is being reflected into the sound fundamentals of our economy with a very strong base of industrial infra-structure and the vast network of technological and management institutes so as to cope up with the ever burgeoning demand of various professionals required to man the various industries. We also made rapid strides into the field of medicine, engineering and various professions such as legal and teaching etc. Though we could not kept pace with the developed countries simply on account of supporting a larger population and due to this we are lagging behind in certain spheres of research, industrial development and technological upgradation. The western countries are talking of post industrial revolution and are faced with crisis of affluency while we have registered quite a satisfactory progress but the population factor always manages to disrupt the goals and objectives of our planning.

Despite all this, the educational standards in India compared to the world standards are not all that backward or unsatisfactory and we too are experiencing the economy approaching modernization and the level of modernity which is an essential component of this process gets reflected from the level and standardization of professional education
being imparted in our country.

This made us inquisitive to look into various levels of modernity of students belonging to various professional streams, viz. medicines, engineering and law. We compared and contrasted them so as to ascertain as to what extent their professional education exposes them to the process of modernization and helps them in acquiring level of modernity. It is with this view that an attempt has been made in the following pages to explore sociologically the networking of relationship between education and modernization.

Since time immemorial, the arts of cutting, hunting and building contributed to the development of human intellect. The observation of the various phenomena in nature laid the foundation of man’s ideas of worship and religion and both increased his knowledge of the physical world. The invention of fire and language were also great steps in the advancement of his worldly knowledge, of a settled life and of his ideas of social relations. Man learnt to rise above his brutal instincts first in the family in the role of a patriarch, then in village in the capacity of the headman and then in society under the bonds of custom and law. This was the beginning of a conscious process of education.
The word education is derived from the word 'educare' which means to bring up, and in the Latin it means to bring forth. Thus education means to bring forth as well as to bring up. Infact, education does not merely mean the acquisition of knowledge and experience, but it also directs the development of habits, attitudes and skills which help a man to lead a worthwhile and purposeful life.

Ancient educationists considered knowledge as the third eye of man, which gives him insight into all affairs and teaches him to act. Ancients used the term 'Vidya' to denote different multiple meanings and skills. The multiple meanings are knowledge, reality, attainment, discrimination, enlightenment and sublime emotion. Each of these has a deep significance in human life and development. The method the ancients adopted to preserve this quintessence of experience for posterity was to adopt the medium of sutras, i.e. a brief catch word leaving it to the future commentator to elucidate the meaning. In small scale, non literate societies such as hunting and gathering bands, formal education was unknown. Young people learned their lessons of life largely by joining the daily round of the social group. Knowledge and skills were usually learned informally by imitating examples provided by adults. It is pertinent to mention that ancient universities like Takshila, Nalanda,
Magadha, Mithila and Nadia etc. attracted scholars like Fa Hien, Huen Tsang etc. from far and near thus making our country even in the ancient period as very rich educationally.

In medieval period, education was religious centred. According to S.N. Mukerji, "The whole educational system was saturated with religious ideals which influenced the aim, contents of study, and even the daily life of the pupils... the learning was prized for its own sake and as a mark of the highest human development and teaching was never handicapped by examination requirements. Learning in medieval India was like the medieval learning of Europe which had become formal and scholastic with a strong emphasis on grammar. By and large, the rulers helped in the spread of the education and patronised men of learning."

Infact, in preindustrial societies like those of medieval Europe, specialized educational institutions slowly developed, along with the specialized role of teachers. However, they provided formal education only for a small minority of population such as future members of clergy and sons of wealthy. By contrast in advanced industrial societies of modern times - education is provided by the state as a matter of right

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# This Quotation has been taken from Aggarwal, J.C. (1989) pp. 32-33: Education In India Policies, Programmes and Development: Global Perspectives. Doaba House, Delhi.
for all its citizens. Formal institutions such as schools, colleges and universities are organised for this purpose. They are staffed by full time professionals and practitioners viz. teachers and lecturers.

Formal education system in India is essentially a legacy of British colonialists. It was introduced by lord Macauley with the professed objective of producing trained manpower for the lower ranks of bureaucracy and professions. Since the time when Macauley conceived and initiated a system of formal education, the changes that have been effected till the dawn of independence and even subsequent to it did not make any radical departure from the direction provided by him.

Modern education stirred the conscience of the people to the goal of political independence. Inspired by the ideas of rationality, liberty and equality, many of the educated Indians got intensity awakened to the ideas of freedom from colonial rule. It turned into a source of inspiration for throwing out British rule in India, while not denying the fact that education was introduced as an instrument of colonial domination, but amazingly education played a liberating role.

As far as modern education in India is concerned, we find three sub-periods when education has been an influential co-factor in the process of change. During the first period, i.e. Early British period to the
end of the 19th century, the new English education actively collaborated in the establishment of the colonial socio-economic and political structure. In this process of subjugation, it also played a kind of liberating role in breaking down traditional norms to the extent needed and in inducing values of a bourgeois society and nationalism. During this period, the liberating influence was internalized and worked in two directions: (i) toward a close scrutiny of the indigenous social system and culture leading to powerful movements of social and religious reform and protest movements like the Satya Shodak Samaj; (ii) towards the process of self discovery and self-assertion in the context of new situation, leading to the creation of an alternative centre of social cohesion - the anti-imperialist movement for national liberation. The British rule tried to use the domesticating role of education for creation, support, and continuation of the colonial structure and succeeded in their objective in an appreciable measure. The nationalist intelligentsia used its liberating potential for social political awakening to mount a powerful national offensive against the colonial rulers.

In the second period which is between the two world wars, for the first time education began to assume a mass character. This carried its liberating influence and its potential for occupational and social mobility lower down the social pyramid to the segment of bottom rung
population. It also began to reach the lower middle and middle castes. This way, it brought about the process of national and social awakening to the working class and peasantry in India. This strengthened the movement for national liberation as well as the movement for social change.

The third period i.e. the post independence period witnessed the process of social and political awakening taking further strides with the spread and growth of education.

Education as an instrument of social change raises three question viz. (i) Relating to agents of change (ii) Relating to message or content of change (iii) Relating to those who are to be exposed to the forces of change. The agent of change is a plurality of individuals and agencies, who differ in their social positions, perspectives and interest groupings.

These differences are important as they lead to differences in articulation and put emphasis on various aspects of the goals of change. A society characterized by plurality of groups will find it difficult to develop a system of education which moves in a linear way to an agreed set of objectives of change. Agents of change in respect of education are found in several groups like policy makers, teachers and trustees.
The second question warrants discussion as to the use of education as an instrument of modernization, the clarity of the concept of modernization and its implication for society. In pre-independent India, education made its impact first in the realm of culture, where it stimulated the process of cultural regeneration. Western education made the Indian intellectuals aware of the need for rational reconstruction of the Indian tradition. Visionaries like Raja Ram Mohan Roy and Sir Saiyyed Ahmed Khan pleaded for the modernization of the Hindu and Muslims traditions respectively. Even those championed the cause of preserving the Indian culture in its pristine glory (like Aurbindo) felt the need for providing a rationalistic reinterpretation of Indian culture. Education stirred the conscience of the people for the achievement of goal of political independence. Inspired by the ideas of rationality, liberty and equality, many of the educated Indians got intensely involved in the struggle of freedom from colonial rule. It turned into a source of inspiration for throwing out British rule from India.

Clarity in the message or content of change is important because it can become the basis for working out a pedagogic philosophy and practice based upon the values which make up the message. Now a days our pedagogic philosophy is the nature of verbal borrowing from the western content. The Education Commission has referred to the need
for reconciling the goal of individual fulfilment with social purpose.

Western education was of crucial importance in shaking the psyche of Indian intellectuals. On the one hand, it generated and sustained a trend of liberal reformist thought leading to various social reform movements and, on the other, it sensitized some alert minds to the value of freedom resulting in the mobilization and intensification of freedom struggle. Singh Yoginder quotes, "...Education has been one of the most influential means of modernization in India. It had led to the mobilization of people's aspiration for nationalism, liberalism and freedom. It alone has been responsible for the growth of an enlightened intelligentsia which carried forward not only a movement for independence but also a relentless struggle for social and cultural reforms." (1973: 106).

Education is most significant instrument of social change. A significant feature of planned social change in India since independence is the unbridled faith that has been reposed in education as the foundation and vehicle for national development. Third Five Year Plan (1961-62) of Indian Planning Commission described education as "the most important single factor in achieving rapid economic development and technological progress and in creating a social order founded as the
values of freedom, social justice and equal opportunity."

In its resolution on national policy on education, the Government of India concurs with the report of the Education Commission (1964-66), which states in the very first sentence that "the destiny of India is now being built in her classrooms;" and after discussing some of the preconditions of national development concludes that: "If social transformation and change on a grand scale is to be achieved without violent revolution (and even then it will still be necessary) there is one instrument, and one instrument only, that can be used - Education. Other agencies may help and can indeed sometimes have a more apparent impact. But the national system of education is the only instrument that can reach all the people" (1964-66, p-4). The Education Commission (1964-66 pp 29) has rightly observed that "in a world based on science and technology, it is the level of education that determines the level of prosperity, welfare and security of the people." The Education Commission rightly observed that the development of human resources through education is an effective panacea for the problems of national development; such as self-sufficiency in food, economic growth and full employment, social, political and national integration and political development. Education is an empowering phenomena which equips the people to combat social injustice and exploitation, and which provides
the necessary synergy for a structural socio-political transformation.

Education by its very nature is a force of social change. But at the same time, it acts as a microcosm of the larger society; and thus prepares the mind of those who would eventually influence the destiny of the larger society. As stated in the UNESCO report, "Education reproduces and even exacerbates and perpetuates the vices inherent in the society ...... However, in apparent contradiction to this educational world may well set the stage, with an interior revolution of its own - for a subsequent social revolution."

Education is an important agency of socialization. Education helps in the socialization of younger generation by providing acceptable values, attitudes and norms of behaviour. Education also helps in providing specific forms of knowledge, skill and occupational techniques. The main aims of education are to enlighten the child, to provide the maximum knowledge, to help him in gaining moral and intellectual effectiveness and to enable the child to cope with the challenges of life.

The knowledge, skills and values acquired through education not only meet the economic needs of society, but they are also permeated

with a social content corresponding to the socio-economic and political structure. The educational process, with its different specializations, different levels and inevitable certification process helps the younger generation to prepare for various jobs according to the diplomas and certificates they possess, which specify their particular skills, abilities and values.

In post-independent India, Government accorded serious attention to the spread of education as it was considered a source of modernization. This led to the expansion and promotion of higher education particularly scientific, technical and professional education. Jawahar Lal Nehru envisaged an important role - the education would play in building scientific and technological India. Sharma S.L. (1992, P 86-87) has very nicely assessed the performance of education in terms of the four facets of modernization, viz., technological, institutional, valuational and behavioural.

Regarding the first facet of modernization i.e. technological, our education particularly higher education has played a key role in accelerating techno-economic modernization by producing technically trained and skilled manpower for promoting India's industrial development and by providing professional manpower for managing
professional organization. We have got the distinction of being the third nation in the world, in terms of the size and magnitude of technical manpower. Our technical and professional manpower is first rated, judged by the acceptable standards of competence. The performance of education in techno-economic modernization in India leaves something to be desired. India is tenth in the world in respect of industrial development, our enviable pool of technical and professional manpower not withstanding. Thus our techno-economic modernization is not commensurate with our size of technical and professional manpower. The very fact that we have overproduced technical and professional manpower is proof enough of the failure of education to impart to us the capability of rational matching of our trained manpower requirements and production targets. The result is that we have to export our trained manpower to other countries.

As far as second facet of modernization i.e. institutional is concerned, education has certainly facilitated the rise of modern institutions in India, including large - scale formal and professional organizations. It has done so by preparing trained civil servants and other functionaries, and by creating new structures of competence to run modern institutions and professional organization. Yet, our modern institutions, including bureaucracy, formal organisations and
professions are known for their red-tapism, nepotism and factionalism. This shows the failure of education in properly socialising our bureaucrats and professionals in the universalistic logic of modernism.

As regarding valuational facet of modernization, education has helped us to adopt modern values of democracy, socialism and secularism. But the same education has enabled us to dilute these values in our own way. Not surprisingly our practice of democracy is closer to the idea of elected oligarchy. Similarly our variety of socialism is more a pretense of equality of opportunity under conditions of structured inequalities. Above all, ritualism rather than rationality continues to dominate the psyche of the educated Indian.

In respect of mobilisation, education has generated a great deal of migration, status mobility and all kinds of social movements in India. Education has produced considerable inter-generational occupational mobility including some amongst the schedule castes, backward classes and weaker sections. Much of this mobilisation caused by education has resulted in positional change rather than structural transformation.

In sum we can say that in colonial period, education has generated cultural dynamics and political mobilisation. In post-
independence period, education has served to promote technological and institutional modernization. There is no denying the fact that education has played an active role in modernization of India.

The term modern has many connotations and carries a heavy weight of its technological polemics. The level of modernization of a society depends as much on the modernization of the minds of people as on modernization of institutions. In essence, a society will be about as modern as its member. Individual modernity refers to a set of psycho-social dispositions which enables an individual to adapt well with industrial - urban, dynamic and civil society. Assuming that modern society is industrial - urban society, Smith and Inkeles (1966, 353) defines individual modernity as a set of attitudes, beliefs, behaviour etc. especially characterizing persons in highly urbanized, highly industrialized and highly educated social settings. Listing to the characteristics or traits of modern man, Inkeless (1969, 210) refers to readiness for new experience, openness to innovation and change, orientation to future efficacy, planning, calculability and aspiration for new learning. Conceiving modern society as a dynamic society, Lerner (1968) underlines the centrality of empathy, i.e. an ability to put oneself in other's shoes and strive to move upwards. He defines modernization as the current term for an old process of social change whereby less
developed societies acquire the characteristics common to more
developed societies. Similarly Stephenson (1968, P-268) defines
modernization" as a personal and cultural expression of one type of social
change, namely movement of persons along a dimension from what is
defined by the cultural norms as traditional to what is considered modern
by the same culture."

In fact the term modernization has been used by different
scholars in different ways. Some use it to mean mod life-styles, while
others mean by it the craze for the latest. Technically, it means nothing
of this sort and it carries two distinguishable interpretation: Historical
and Normative. Historically, modernization refers to a type of social
change which originated in the industrial revolution in England
(1760-1830) and in the political revolution in France (1789-1794)
(Bendix, 1967). In its normative sense, modernization refers to 'a process
of social change whereby less developed societies acquire the
characteristic common to more developed societies (Lerner, 1968). To
Sharma (1992) modernization refers to culture of a high technology,
formal organizations, civic value system and vigorous social mobilization.
He has very elaborately explained his definition of modernization by
giving details of four stems of modernization, viz. technological,
institutional, valuational and behavioural.
The version of modernization which stress technological progress is indeed so popular that even a socialist nation such as China adopts it as a legitimate goal. This is the sense in which public leaders of the developing countries adopt modernization programmes. Levy articulates the common place conception when he observes, "A society will be considered more or less modernized to the extent its members use inanimate sources of power or use tools to multiply the effects of their efforts."

Institutional stem implies emergence or preponderance of market economy, profession, bureaucracy and democracy, all of which are based on the central features of modern organizations. They are their intended legal rational character, their supposed commitment to universalistic and impersonal norms and their professed concern for efficiency and excellence in handling large scale operations.

The valutational stem of modernization refers to emergence of civic values, signifying a transition from the sacred to secular value system. In it secularism, achievement orientation, universalism and individual autonomy are regarded as modern rational values.

Behavioural stem manifests itself in the form of increased psychic, physical and social mobility as a result of an enhanced sense
of individual efficacy. The sense of individual efficacy is believed to be derived from the rational presupposition about man’s ability to conquer nature and shape his own destiny.

After going through the various indicators of modernity and definitions of modernization, it comes out that rationality is the main denominator of modernity. Accordingly, modernization may be defined as a process of structural transformation along rational lines, irrespective of any reference to any model. So, a modern society retains rational practices, cares for the rule of evidence in regulating social transactions and emphasises the logical unity of means and ends to achieve increasingly more efficient modes of living.

As the present study deals with the impact of professional education on the overall modernity score of the respondents, it is imperative to know about professional education and profession. Professional education is regarded as the mastery of skills, knowledge, understanding of principles and an understanding and acceptance of the values underlying the practice of those skills and that knowledge within a profession. Professional education has two main aims: First, Professional education produces recruits to the profession that have a professional ideology, especially in relation to understanding good
practice and service. Second, Professional education produces new recruits to the profession, who at the completion of their training, have a sufficient level of knowledge and skills to enter practice and profession will ensure thereafter that its standards are maintained. Houle* (1980, P-75) has aptly quoted, "The ultimate aim of every advanced, subtle and mature form of continuing education is to convey a complex attitude made up of a readiness to use the best ideas and techniques of the moment but also to expect that they will be modified or replaced. The new machine will soon be antiquated, the new drug will be outmoded, the new principle will yield to a more profound one, and the revolutionary approach will become first familiar and then old fashioned. Everyone must expect constant change and with it new goals to be achieved and new understanding and skills to be mastered."

Formal education contributes to the professional constellation, its import changes radically with the assertion of a modern form of professionalism. The established professional elites could secure their social position through their education, which symbolized their claims on social status, and superior competence. Professions came to depend upon specific formal training and anonymous certificates.

* This quotation has been taken from Peter Jarvis (1983): Professional Education, pp. 48-49. Croom Helm Ltd. London and Canberra.
The emergence of professions and their phenomenal growth in recent times, is generally understood as a natural response to the demands imposed by ever-increasing process of the division of labour and specialization inherent in modern science and technology. Professions command great prestige in contemporary society and that professional status is a highly sought after value.

The term profession has been described by different scholars in different ways and there is no unanimously accepted definition of profession. Carr-Sounders defines profession as an occupation based upon specialized intellectual study and training, the purpose of which is to supply skilled service or advice to others for a definite fee or salary. Cogan defines profession as a vocation whose practice is founded upon an understanding of a theoretical structure of same department of learning or science. Elliott states that a professional group controls a body of expert knowledge which is applied to specialist tasks. Sharma (1974) reveals that there are two approaches regarding the conceptualization of a profession. They are attributional cum normative and processual cum organizational.

# These definitions have been taken from Peter Jarvis (1983): Professional Education, P.20. Croom Helm Ltd. London and Canberra.
In attributional cum normative approach, Abraham Flexner define a profession as an occupation having some distinctive traits, pre-eminentely an 'altruistic' orientation. Louis Brandcis maintained that the attributes of a profession are that its training is intellectual in character, that it is pursued largely for other and not merely for one's own self and that the amount of financial return is not the measure of success. Scholars like Carr-Saunders, Wilson, Greenward etc. have also sought to build on this attributional - cum - normative formulation. These scholars have given some common attributes of profession. They are special nature of professional knowledge, service orientation, code of ethics and self regulation.

The critics of these attributional cum normative paradigm have led to reformulation of the concept of profession, with its stress on the process of professionalization. Hughes (1963) defines professionalization as a change of status of the occupation in relation to its own past and to the other people - clients, the public, other occupations - involved in its work sphere. Such a change entails more independence, greater recognition, a higher standing, a large measure of autonomy in managing its affairs, and a claim to authority in relation to clients. Similarly Turner and Hodge suggests four indices of professionalization i.e. the degree of substantive theory and practice, the degree of monopoly over particular
services, the degree of external recognition and the degree of organization of a profession. In organizational approach, the core features of professions are monopoly, autonomy and authority. So there is not any unanimous definition of profession and this leads to emergence of two important issues pertaining to profession. First, Profession implies a body of theoretical knowledge, to be acquired through a prescribed course of intellectual training. Second, Professions are tightly organised bodies, which among other things, set the standards of proficiency, regulate entry into the profession, grant licence for its practice, secure monopoly over its practice and prescribe a code of conduct for the members in their dealings with one another as well as with the clients. Now a days professionalism is considered as an indicator as well as facilitator of modernization.

Now it becomes pertinent here to mention as to how education brings out social changes. It also becomes important to know how education influences the psycho-social dispositions or values or thinking of students at different levels i.e. at school, at college or at university level. A vast and impressive literature on education, modernization and social change has come out, which helps us in understanding the efficacy of education in bringing about desirable change.
REVIEW OF THEORETICAL PERSPECTIVES:

In the functionalist camp, there are two approaches: Economic and Sociological. The economic approach considers education as an input for development. The sociological approach considers education as an agency of value socialization for modernization.

In economic functional approach, classical economist such as Malthus, Mill and Senior viewed education as only indirectly relevant to economic development. Many contemporary economists (Libenstein 1965; Anderson 1968) hold it as of direct consequence. Education is seen as promoting economic development in several ways. First, in so far as knowledge is necessary for effective manipulation of natural environment, education helps the developing country to find new economic resources and better tools. It also aids the process of development by providing necessary skills to a developing economy. Education also tends to raise productivity by fostering an ideology favourable to economic growth. This has eventuated a new perspective in the theory of economic policy called "Investment Approach to Education", which implies that education inputs result in economic outputs. The investment approach has taken two forms: manpower planning analysis and aggregate production function analysis and both
these forms signify education as an economic input for development. This approach to education has been criticised. Hanf et al (1975) have challenged the belief that overall enrollment in Schools - is the sine qua non of economic growth. Referring to European Social History they have argued that industrial revolution had taken place there amidst a largely illiterate population: Education for all was a result of and not a prerequisite for, economic development. Investment in education are most likely to be profitable under certain conditions generally found in highly developed economic systems, foremost among which is equilibrium between labour, which includes education and capital.

In sociologically functional approach Education is widely accepted as a necessary tool for the attainment of goals. John Dewey (1937, 235-237) was the first to stress that education is an important mean to push society in a progressive direction. The question to him was not "whether the schools shall or shall not influence the course of future social life, but in what direction they shall do so and how." Many scholars (Clark, 1962; Coleman 1965; and Moore 1963) have recognised the value of school. They have considered the school as an engine of social psychological changes in developing countries. Some studies (world Bank, 1980a; world Bank 1980b; Mendis, 1981; Martin, 1982; and Pareek 1982) have indicated that though there is complex relationship
between formal schooling and modernity, the schooling is an important element of modernity. (Raza and Ramchandran, 1990). Dreeben (1968) in his stimulating book on "What is learned in School" has given the sharpest theoretical formulation of the latent functions of education for modernization. For Dreeben, the school is a specialized and an independent institution with distinctive structural attributes of its own. Contrasting family with school, he argues that schools differ from families due to structural properties like size, composition, degree of differentiation, duration of given relationship, child - adult ratio, the range of events and activities, schedule and award system. Dreeben argues that because of these structural properties school helps in the learning of social norms of independence, achievement, universalism and specificity, all of which are congruent with the social demands of the modern, industrial and democratic society. For him, the school is a specialized agency of socialization in modern societies functioning to facilitate the transition of the child from the particularistic world of family to the universalistic world of work and citizenship.

Inkels, Alex (1973, 174-176) advanced a "Theory of Educational Effects". Conceiving education as a mechanism of cultural diffusion, Inkeles argues that "in developing countries, school is one of the most influential means for imparting modern attitudes, values and behaviour."
The school modernizes through the four processes—reward and punishment, modelling, exemplification and generalization. Thorough reward and punishment, the child imbibes a sense of planning, through modelling (imitation of significant and powerful persons in his surrounding or environment), the child learns the value of universalism or distributive justice, through exemplification (i.e. a process whereby the individual incorporates into himself not a personal model but an impersonal rule), the child cultivates an attitude of maintaining a regular schedule and through generalization (i.e. a process whereby having mastered one or more skills, the individual comes to believe in his general capacity to acquire skills or to solve problems), the child acquires a sense of efficacy. According to Inkeles, all these four values help one to cope with life in the urban industrial modern society. Weiner (1966) has considered the education as one of the instrument for modernizing man's values and attitudes.

In counter position to functionalist stance, there is the radical appraisal of the role of education in modernization. Some fundamental re-thinking of the school’s function in relation to development has been done in radical circles. Accordingly, many scholars have found that schooling or education have little or no impact at all on modernization process. They have questioned the functionality of schools in relation to
development goals (Freire Paulo, 1970; Illich Ivan, 1971; Reimer, 1971; and Goodman, 1971). Freire Paulo provides a sharp critique of existing education as "banking" system. He also views it as an instrument of oppression, for an educated man is the adopted man, integrated as he is into the logic of the present oppressive system. He, therefore, pleads for a basic change in the philosophy of education from education as the practice of domination to education as the practice of freedom. Illich Ivan (1971) has advocated deschooling for the whole society. Illich criticised the way in which schools formalised knowledge, gave learners the impression that they could learn only through school, whereas he points out that most of the learning takes place outside the school. He argues that school prevents "personal, creative and automatic interaction" among learners and teachers and that "we have all learned most of what we know outside the school". Illich says that "not only education but society as a whole needs deschooling." Silberman (1970) indicates that school are incompetent in promoting the growth of reflective self.

The two theoretical perspectives i.e. functional and radical represents two anti-thetical view points regarding the role of education in development. The functionalist perspective commends the role of education in development while the radical perspective condemns its formalized set-up and pleads for its emancipation from it.
REVIEW OF EMPIRICAL STUDIES:

There is an impressive body of empirical literature dealing with effects of formal education on individual modernity. Most of these studies have shown that education is a prime determinant of attitudinal modernity. Lerner (1963) on the basis of his study dealing with adults sample from six developing countries in the Middle East has asserted that literacy has played a crucial role in the modernization process. Inkeles (1969, p. 208) in his Project on the Social and Cultural Aspects of Economic Development at Harvard Center for International Affairs has interviewed six thousand men from six developing countries (Argentina, Chile, India, Israel, Nigeria and East Pakistan). His aim was to study the impact on the individual of his exposure to and participation in the process of national and economic modernization. In his study Inkeles contends that 'Education is the most powerful factor in making men modern.' Waisanen and Kumata (1972; p. 21-35) in their study "Education, Functional literacy and participation in development" based on samples of adult age, twenty and older, drawn from the USA, Finland, Japan, Mexico and Costa Rica, advances the thesis of curvilinearity in the relationship between education and various indicators of modernity.
There is only one study by Saunder (1969) which shows that education undermines modernity. Saunder in his study, education and modernization in Brazil has remarked, "Brazilian schools, especially at the primary level where their impact on personality development is greatest, tend to stifle rather than develop the personality traits on which modernization depends and from which the society must draw its innovators."

There are many other studies which were conducted on school going children or adolescents. Armer and Youtz (1971, 604-626) represents a significant advancement regarding the effects of schooling on pupil modernity. The central proposition of their study is that "formal Western education leads to the modernization of perspectives in traditional non-industrial societies (1971; p. 611). They have taken sample of 591 seventeen year old males in Kano, Nigeria and covering both students and non-students youth, Armer and Youtz (1971, p. 621) concludes that western education does, indeed, have a definite effect on value orientations of youth." Dubey (1972)* has also conducted his study on adolescents in Nigeria. He has concluded that in most circumstances, every year spent in schooling helps the youngsters to increase personal

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# This study have been taken from Thakur (1991). (See Bibliography)
development in the form of more modern attitudes, values and behaviour patterns." Sack (1973) in his Tunisian study have shown that education prepares the individuals for occupation world. To him, "education is viewed as having its greatest impact as a supplier of much needed skills to a developing economy." Klineberg also (1973) in his Tunisian study have found the schooling to be more effective in modernizing the adolescents than the parents' attitude. Cunningham (1973) has also found substantial correlation between the student modernity and grade point average. deRebello (1979) conducted her study on 447 school students in California and have found positive and significant relationship between the years of schooling and the individual modernity. All of the empirical studies (mentioned above) have shown positive relationship between education and attitudinal modernity.

CRITIQUE OF FOREIGN EMPIRICAL STUDIES:

Empirical studies have been criticized by different scholars on different ground. Inkeles (1973; p. 169) argues that no amount of statistical controls can serve to provide a definitive answer as to the independent role of education in view of the constraining limitation. Armer and Schnaiberg (1972) have also criticized the foreign empirical studies. They are of the opinion that some of the scales (Smith and Inkeles
1966; Schnaiberg, 1970; Kahl, 1968; and Armer and Youtz 1971) for measuring individual modernity are moderate in their degree of equivalence but are inadequate in their degree of validity. A serious drawback of these studies is their preoccupation with adult samples which renders them vulnerable to irrefutable charges of recall inaccuracy, failure to disentangle the effects of schooling from its sequel effects of post school openings made available by schooling, and the lack of control over the contaminating influence of a host of other forces to which the respondent might have been exposed since he left school.

**REVIEW OF INDIAN STUDIES:**

In India many research work have been done on education and modernity. Most of the Indian studies have been concerned with 'College Effects' (i.e. We have studies dealing more with college setting than with school setting). In India, research on education and modernity has progressed in two phases. Beginning with 1960, the first phase continued upto early 70's.

Cormack (1961) was the first to conduct a full length study of education and social change in her book, "She Who Rides A Peacock". In her study she has taken the sample of 404 students drawn from over a dozen colleges located in various parts of India. She found little evidence
of change produced by education. Commencing on the concern of educational institutions of change, she observes, "They are not considering values, attitudes and attitudinal change. They are concerned with certificates, degrees and employment (227)." Shah (1964) conducted a study on social change and college students of Gujral. He found that students are traditional in some areas like caste endogamy, joint family and gainful employment of married women and partially deviated in some other areas as boy girl relationship, caste commonality, selection of bride, livelihood and occupation. Only very few students were fully deviated from traditional framework (1964, p. 192). Damle (1966) in his study on a special sample of 26 academically and intellectually gifted college youth in Poona focused on the process of "individuation" (modernization) as a result of education and has found some positive evidence to that effect. Sullivan (1968) in his study 'Education in Social Change' has sought to compare four secondary teacher training colleges in India with reference to their roles in a changing society to determine whether the present programmes contribute to the remoulding of traditional values, beliefs and practices or promote the established social order. He has concluded that "the college serve primarily to reinforce rather than to change the beliefs of the students" (1968, p.76).
The second phase commenced with the publication of "Field Studies in the Sociology of Education" by Gore, Desai and Chitnis (1970) with the shift in focus from attitudes towards social change to modernity orientation. They have found level of education as an important variable in determining modernity of students. They have concluded that "The State, sex and educational level of the respondents were all important variables in determining the modernity of student sample..." (1970; p. 584). Bhatnagar (1972) in his study of rural areas have found educated to be more modern than uneducated. Malik and Marquette (1974) in their study "Changing Social Values of College Students in the Panjab" have found education as an agent of attitudinal change and concludes that "... an overwhelming majority of Panjab youth favours the abolition of traditional institutions as caste and untouchability and strongly approve of a general social revolution in India" (1974; p. 805). Raghuvanshi (1980) in his study "Formal Education and Individual Modernity Among Rural Youth" has taken sample of 326 male Rajput youths in age range of 18-20 years. The sample was taken from Gehlot - Satha, an ethnic region comprising of 60 Rajput villages in the districts of Meerut and Bulandshahr of western U.P. in India. He has concluded that "formal education affects all the value orientations and behavioural aspects of individual modernity" (1980, p.17).
Jindal (1981) in his study of four schools in Hissar, two each public and Government, reported that more of public school students were modern than students of Government School. Similarly, Thakur (1991) in her study at Dehradun observed that a much larger number of students of Public school and Christian denominational school were modern compared to those of Government and Hindu denominational schools.

On the other hand, some studies have shown negative relationship between education and modernity. Garg (1976) in his study have followed a control group design and found no significant difference in the modernity of college students and their higher secondary pass compeers who have discontinued studies. Sharma (1979) has analysed the role of university education in student modernity. In his study, he has drawn the sample of 770 students based on faculty and level of education. He has shown a trend of negative association between level of education and student modernity (1979, p.184). Similarly, Sharda (1989)\# in his study on "Schooling and modernity" has proved that a

\# This study have been taken from Sharma, S.L. (1992). (See Bibliography)
negative relationship exists between education and modernity. He reports, "the better educated respondents were less modern in their outlook than the less educated and illiterate respondents."

CRITIQUE OF THE INDIAN STUDIES:

Not denying the fact that many studies have been done in India, but the studies which were conducted in 60's are just like the surveys of college students attitudes towards caste, untouchability etc. None of these studies have systematically investigates the relationship between level of education and modernity score of respondents. These studies have not employed any standardized measure of modernity.

The study by Gore et al (1970) have tried to identify some broad indicators of modernity such as secularism, activist orientation, optimism, achievement orientation and civic sense, but when it comes to operationalization, it leaves much to be desired. Most of the available studies have suffered from ambiguity in their conceptualization and operationalization of change and modernity. Most of the studies lack a proper research design as they have done with some sort of random sample of college students, without even drawing samples differing in educational level - a distinction which is so crucial for assessing the effects of amount of education.
PURPOSE OF THE STUDY:

The study is intended to investigate some of the important dimensions of relationship between education and modernity. It seeks to examine the effect of professional education on the overall modernity and on its dimension through a standardized measure of modernity.

OBJECTIVES AND HYPOTHESIS:

1. To examine the effect of professional education on students' modernity.

2. To ascertain the effect of levels (1st year, 2nd year, 3rd year i.e. undergraduates and post graduates) of professional education on students' modernity.

3. To assess the effect of type of professional education on students' modernity.

According to the above objectives, the study seeks to focus on the following terms of enquiry:

1. Whether or not professional education promotes attitudinal modernity?
2. Whether the students of postgraduate classes are more modern than the students of undergraduate classes and whether professional education promotes higher level of modernity or not amongst undergraduates?

3. Whether the medical students are more modern than the engineering students and the engineering students are more modern than the law students?

Pursuant to the above ends, the following are the hypothesis in this study:

1. Professional education promotes modernity.

2. Students of postgraduate classes are more modern than the students of undergraduate classes.

3. Medical students are more modern than the engineering students and the engineering students are more modern than the law students.

**SIGNIFICANCE OF THE STUDY:**

The study has both theoretical as well as practical importance. Theoretically, it is important because it systematically investigates the effect of education on modernity. Most of the studies dealing with the
relationship between education and modernity have been conducted mainly on whether or not schooling promotes modernity, but the relation between education and modernization has not been comprehensively investigated by many researchers. This study attempts to examines the role of education towards various dimensions of modernity.

The practical importance of the study lies in its implications for educational policy and planning in India. If the findings show positive relationship between education and modernization, it will have great relevance to the social policy considerations, to the allocation of resources and to the maximization of impact in programmes of planned change. If the findings show lack of positive relationship between education and modernization, it means we should restructure our educational programmes, so that it can be a potent instrument of modernization. So this study would have both theoretical as well as practical importance.