CHAPTER I

TEACHER INNOVATIVENESS

CONCEPTUAL FRAME

1.1.0 INTRODUCTION: CHANGE

Old order changeth yielding place to new
And God fulfils Himself in many ways
Lest one good custom should corrupt the world

These memorable lines of the immortal poet - Lord Tennyson, have become an adage widely acceptable. Change is the law of life. It is the way and means for progress. There is hardly any field which is not within the ambit of change.

Great many changes have been taking place in all spheres of human life. Education is no exception to this. In fact, change is the outcome of the dynamic potential inherent in every system involving human efforts.

> Education has continued to evolve, diversify, and extend its reach and coverage since the dawn of human history. Every country develops its system of education to express and promote its unique socio-cultural identity and also to meet the challenges of time. There are moments in history when a new direction has to be given to an age-old process. (National Policy on Education 1986)

1.1.1. EDUCATION: INSTRUMENT OF CHANGE

Education is the earnest endeavour of man to enhance and enrich his existance. It is the means for the emancipation of the masses, especially in a country like ours. For us, it is an instrument for the evolution of an egalitarian society.

> Education has to change or adopt modifications because the determinants of it vary with the changing times. It is a powerful instrument for change

> in Society. The progress of a country can be measured with the quality and quantity of the schools. For India attention has been directed towards quantitative aspect of educational planning and expansion of educational facilities at all stages. (Adisesiah 1970)

This has to be achieved through a well planned system of education which in the words of Mahatmaji is 'the spearhead of a silent social revolution'. Hence, it is obvious that the educational system in our country has to be dynamic and change prone.

> The most important and urgent reform needed in education is to transform it, to endeavour to relate it to the life, needs and aspirations of the people and thereby make it a powerful instrument of social, economic, and cultural transformation necessary for the realization of the national goals. (Report of the Education Commission 1964-66)

1.1.2 SCHOOL SYSTEM AND SOCIAL CHANGE

Social changes may be of three kinds:- (1) Education as a necessary condition for bringing about social change (2) Education as an instrument, tool, media, agency or agent for bringing about such change and (3) Education as an effect or outcome of social change in a country.

There are three functions specified for the school system. (a) The conservative function: The school should reflect social change so as to avoid any cultural lag between school and society, as they are meant only for preservation of society. (b) Creative function: In a democratic society education can prepare for changes in society and that is part of its creative function. (c) Progressive function: In a democratic society education has to play the progressive function also and should prepare for changes by encouraging open mindedness and critical attitude. The school should take responsibility for social progress, and for promotion of better social order.

> One of the catchwords used to characterise current needs in the world of education has been 'innovation'. Behind the attempts to innovate has been the growing

> realisation that education in modern society is operating under quite new conditions which necessitate a thorough rethinking and an abolition of time honoured conceptions and practices.
> (Husen 1971)

1.1.3 CONDITIONS COMPELLING CHANGE

There are three conditions which impel us to introduce changes and innovations in our educational system. The first condition which necessitates the introduction of change and innovation is the continuous scientific studies of behaviour of learners, having great impact on the curricula at different levels.

The second condition which necessitates the introduction of innovation is the application of research findings in the area of structured and organized activities in the actual class room settings.

The third condition is that now all over the world educationists and psychologists are engaged in creating materials for instruction that are superior as compared to what we had in the past.

1.2.0. EDUCATIONAL CHANGE IN INDIA

India is engaged in overhauling its traditional curriculum and methods of instruction to keep pace with the development in other areas of teaching which were evolved long ago for traditional society that have become out moded in the present context of technological development. Our country is undergoing an educational transformation in tune with the ongoing social change which is gaining momentum.

> Educational change cannot be accomplished by educational means only. The socio-economic changes are more basic and they will always have to provide the fertile ground for educational changes which are compatible with the societal changes at large. (Husen 1971)

1.2.1. CHANGE IN POST INDEPENDENT INDIA

In the post Independent era, through planned economic development the process of socio-economic re-generation has set in well. The factors like growth of population, explosion of knowledge, improved means of communication, high health standards, and advanced science and technology have acted as catalytic agents

and spurred a process of change in educational institutions and teachers.

In order to bring about reforms in our schools many institutions have come into being, viz., NCERT, National Council of Teacher Education, Centre for Advanced Study in Education (CASE). Besides, several Commissions and Committees have also been set up from time to time. The University Education Commission (1949), Secondary Education Commission (1952-54), and the Education Commission (1964-66) etc., were appointed by Independent India to critically examine the various facets of education and to recommend improved practices and programmes.

Training programmes tailored to the needs of the secondary schools are organised by colleges of education and through departments of extension services, and SCERT to orient teachers towards new ideas and practices in education.

1.3.0. TEACHERS' ROLE IN EDUCATIONAL CHANGE

The demands made on school by rapidly changing society have radically altered the teachers' role and the conditions under which their role is to be played. The task has become even more challenging due to knowledge explosion especially in the realms of Science and Technology where knowledge doubles itself in less than a decade.

The rapidity with which teachers' role is undergoing change and the forces that are at work in re-shaping the programmes and procedures in schools are matters of vital concern to the teachers of tomorrow..

A model teacher has to be forward looking and dynamic, capable of critically comprehending shape of things to come and capable enough to adapt himself to the unforeseen developments. In the words of the Mother of Shri Aurobindo Ashram, "Blessed are those who take a leap towards the future".

According to Gore (1967) merely exhorting teachers to become agents of social change will not suffice. They must be made to realise with the help of suitable sociological analysis of the Indian society today as to why and how they are expected to act in such a manner that the equalization of educational opportunity, social mobility and modernization are really achieved by the children coming from all social classes and categories.

Every educational institution expects that its children learn to live in a world in which both change and difference are important factors of life. Children cannot grow to the extent of our expectation if not helped by teachers, parents and other related change agents.

1.4.0. EDUCATIONAL CHANGE AT DIFFERENT LEVELS

Independent India has launched a series of schemes for necessary changes at different levels of our educational ladder. This has provided an impetus to the developmental efforts for educational expansion bringing about phenomenal growth both at Secondary and higher educational levels in our educational system.

1.4.1. SECONDARY EDUCATION LEVEL

The Indian Education Commission (1964-66) has recommended exhaustive programmes for qualitative improvement at the secondary level.

Many of these ideas have since been converted into projects and programmes and initiated into our secondary schools. The stream of the reforms which began in 1955-56 with the establishment of All India Council of Secondary Education snowballed during the later half of the 60's and in the 70's with the starting of NCERT in 1961. (USEFI) United States Education Foundation in India and the Ford Foundation also served as potential agencies for influencing educational change. The British Council for Education in India has also contributed its mite for propagating constructive practices in our schools. Other organisations like the All India Council of Secondary Education (AICSE), State

Institutes of Education (SIE) and the State Council of Educational Research and Training (SCERT) were established. In 1959 the All India Council was reconstituted and the Directorate of Extension Programme for Secondary Education (DEPSE) was established. The Extension Services programmes of DEPSE were carried through a network of Extension Service centres attached to selected Colleges of Education in the country.

1.4.2. HIGHER EDUCATION LEVEL

A number of reforms have also been suggested for implementation in higher education. Some of these in the Indian Universities are the introduction of an enriched programme of general education, semester system, three year degree course, establishment of guidance and counselling centres, College Science Improvement Programme (COSIP), College Social Science and Humanities Improvement Programme (COSHIP), Faculty Improvement Programme (FIP), establishment of Centres of Advanced Study, reorganising departments through a programme of special assistance to autonomous colleges, instituting a scheme of national lectures, programme of visiting professorships, examination reforms, book banks, exchange of teachers, teacher fellowships, National Service Scheme (NSS), Socially Useful Productive Work (SUPW) and many other programmes.

These have been mostly planned and sponsored by the University Grants Commission. There are, however, many other programmes of local and institutional nature, planned and introduced in various universities and colleges of Higher Education.

1.4.3. NON-FORMAL EDUCATION

A systematic programme of non-formal education has been launched for school dropouts and for those who could not attend schools. Modern technological aids have been used to improve the learning environment of NFE centres. An array of meticulously formulated strategies based on micro-planning could be implemented to ensure compatibility in curriculum construction, maintaining articulation, balance, and continuity (ABC), in respect of both nonformal and formal systems of education in our country with the avowed view of making the entire educational system a thoroughly mass oriented process for national progress through social education, adult education, continuing education, open school, open university as well as mass media utilization.

SECTION II - INNOVATIVENESS

1.5.0. INNOVATIVENESS DEFINED

Innovativeness refers to the adoption of novelties, the alteration of what is established by the introduction of new elements or forms (Oxford Dictionary 1933). An innovation is an idea, or practice, perceived as new by an individual. It is the perceived objective 'newness' of the idea or practice that determines the individual's reaction to it. Barnette (1953) defines innovation as 'any thought, behaviour or thing that is new because it is qualitatively different from existing forms.'

Miles in his book: "Innovation in Education" (1964) states, 'Innovation' is a species of the genus, 'Change.' Generally speaking it seems useful to define an innovation as a deliberate, novel, specific change, which is thought to be more efficacious in accomplishing the goals of a system. Thus, innovation refers to new ideas, new experiments, new performances, new actions, practices and devices in the various fields of human endeavour.

Innovativeness is a behaviour characteristic that involves specific change which is thought to be more useful and fruitful in organising and implementing the functions of any individual.

An innovation is the outcome of an urge to be experimental in one's action and outlook. The 'affective aspect' of it means that the individual has become fed up with the routine procedures and has a desire to change the established methods. It involves the 'guts' to deviate from the regular ways of doing and to adopt new or novel performances, blazing a new trail.

Innovativeness indicates not only the invention of new ideas, objects or ways of doing something in a new, better way but also the adoption of an innovation when brought to notice without much time lag. It implies an open mind, a readiness to accept and adopt innovations when found useful and necessary for progress and development of self or organization. It is not adopting change for the sake of change but change to achieve the objectives better.

Innovativeness is purpose-oriented and not simply novelty-oriented. Innovations are novel but all novelties are not innovations. It is purposive and purposeful change that characterises an innovation. Craze for novelty is simply expensive. Innovations cannot afford to be merely expensive.

Innovativeness is defined as the degree to which an individual is relatively earlier in adopting new ideas than the other members of his social system (Rogers 1969). Education has the conservation role

as well as the promotion role. The conservation role often brings in resistance for change. The time lag between the invention and adoption of an innovation in education is larger when compared with other fields of human endeavour such as agriculture, medicine, or military science. Innovations result in immediate returns in those fields but in education innovation effects are not generally tangible and they also require long time to fructify.

Innovativeness implies the initiative on the part of the individual to accept and adopt what he feels to be good and useful, bravely discarding what he has been following all along. In short, to be innovative is to be creative and constructive. It is this quality of the human being that paves the path of progress in all walks of life.

Innovation is the deviation from institutional norms while accepting the culturally prescribed goals. But conforming behaviour requires the acceptance of both the norms (institutional means) and the values or cultural goals. Deviant behaviour may arise from adhering to goals while departing from approved means as an innovation (Kuppusamy 1982).

Innovations are introduced in any system as solution to the perceived problems and also to achieve

better results either in quality or in quantity or in both particularly with a minimum cost. But in the field of education the ultimate goal of introducing innovation at different levels or stages should be to bring in increased learning in the students and achieving academic excellence.

1.6.0. INNOVATIONS PLANNED AND INTRODUCED

The innovation introduced without proper planning, taking stock of the physical, human and economic resources is bound to fail. It is not enough if only the availability of physical, human and economic resources are alone considered for introduction of innovation, preparation of teachers and other field workers for implementation of the innovation on right lines is also of supreme importance.

The ultimate objective of any educational innovation should be social and national in its import. Innovations introduced without considering these aspects may lead to wastage of scarce resource which a country like ours cannot afford. It may not even improve the social system and thus hardly help the country to reach the goal of modernisation.

In the field of education, according to Ivor Morrish (1976),

> Innovations are usually concerned with increased learning or atleast with more individualized learning, with broad attempts to improve the quality of teaching and its professionalisation and with more developed relevant and refined curriculum.

In education, we are, however, less concerned with the actual innovation of devices and methods than with their use and dissemination throughout the schools.

Innovation, therefore is planned change, a change brought out by conscious effort, an effort based on the realisation of the need for the 'good' of the change for achieving the objectives.

The distinction which Miles (1966) makes between 'innovation' and 'change' is that innovation is clearly more planned, deliberate, routinised and willed than change which is more spontaneous by nature. Innovation is not the drift change, a change resulting from the rolling by the running current of events in particular field of activities.

Weshly (1969), in a report of innovation, clarifies two points. Innovation is concerned with the devise, the most effective combination of means to

produce specially conceived ends and change in education can no longer be left to casual initiative by separate groups and purposes because it is more disorganised and can be disruptive.

Planned change in education depends to a very large extent upon the process of institutionalisation. But generally in education it is a long-term process.

Havelock (1970) in his important study on 'Planning for Innovation' suggests six types of changes which may lead to an innovation. They are: (a) Substitution: Depending on the need, this may range from replacement of one teacher by another to the substitution of anything like a hardware or a software, so that the substitution of what appears to be a figure-head may well prove to be the substitution of even new organization. (b) Alteration: Miles (1966) has collected a big compendium of studies to exemplify the effects of this particular type of change. Here he considers alterations in existing structures instead of introducing totally new, for instance using 16 mm film in the place of 8 mm film. (c) Addition: This category is just adding without changing old elements, for instance using a diagnostic test to identify the pupils' problems without changing the style of teaching or such other factors. (d) Restructuring: A fourth category suggested by Havelock is restructuring which may be a

question of material re-arrangement of work-space so that teaching to smaller groups is made possible or it may be a thorough revision of interpersonal relations within the school by the development of an increased number of staff seminar groups to discuss and ventilate educational problems. (e) Elimination of old behavioural patterns: An example for this type could be something like total elimination of a lecture method in the class and resorting to small group seminar method. This might appear as over simplification of the situation but what is so far learnt about inter-personal relationship and group dynamics does not suggest whether the group operation could eliminate mental distrust or increase it: (f) Reinforcing of old behaviour. Most of the refresher courses for teachers are basically of this type. In the main, such courses possess sufficient basic 'known' materials to reinforce what the teacher feels he already knows.

1.6.1. INNOVATIONS IN THE PRESENT CONTEXT

Innovation in our present context may not or does not necessarily mean something which is entirely novel. It connotes rather something which is 'fresh' and 'new' from the point of view of those people using it. In his "Technology and Change", Schon (1967) is of the view that an act is innovative only if it adds to the sum of known innovations.

At the same time it is true that certain innovations, in the words of Hauberman (1963) are 'one-shot operations' in order to get a particular change installed. Deliberate changes of this nature, however, take place somewhat infrequently. There is sound reason for this.

Institutions and organisations cannot continue to be smooth sailing systems for ever. There are times when they find themselves in a blind alley. Then they cannot but change their style of functioning. There also it is individuals who take the initiative and bring about the break through. A teacher introduces an innovation knowing fully well that he has to face problems.

Some innovations require simply the adoption of an innovation by an individual member of staff within the limits of his own class room. He is free to use any new aid or method himself in his class and therefore he is 'unencumbered' in his acceptance of this type of innovations.

If, on the other hand, the innovation is in the form of a project involving more people, the innovating teacher is at the mercy and co-operation of others. Thus the involved innovative capacity is encumbered, by a variety of contingencies related more to human relationships.

Generally speaking, things and informations are more easily handled and introduced than are changes in human attitudes, practices and values.

1.7.0. FACTORS CONDUCIVE TO INNOVATIVENESS

In this context it is to be noted that there are factors that facilitate adoption of innovations.

Havelock (1970) gives a list of the following factors that are conducive to innovativeness. 1. Teachers' being favourably disposed towards the innovation.
2. Teachers' clear understanding of the innovation.
3. Innovation being within teacher capabilities.
4. Provision for necessary resources for innovation.
5. Making necessary administrative and organisational arrangements. 6. Ability of carrying out the correct diagnosis of the pupil. 7. Channels of communication being used for (a) giving information (b) seeking co-operation (c) resolving factors (d) changing attitudes.
8. Adequate time being given for the development of factors, 1, 2, 3, 6 and 7.

Besides the situation is different where an innovation is being made for other reasons than it offers opportunity for experiment. That is, because it holds out some prospect of benefit to the people affected and on these grounds they consent to it. Innovators may then more readily be able to persuade people to co-operate (Michael Young 1967).

The adoption process occurs in stages. There is a very early stage when two or three percent of innovators decide to start innovating, followed by the second stage in which the early adoptors about 5% in size, get involved because of their observation of others' practice with no disastrous results. Then there occurs a middle stage in which the majority, about 75% adopts comparatively quickly influenced primarily by the innovators themselves. This is followed by a late stage when the small residue of resistors or laggards at last succumbs. But still will be a small group of resistors who will never give in.

1.8.0. FACTORS IMPEDING INNOVATIVENESS

The phrase 'mental inertia of preservation' is well known in the realm of psychology. Continuation of the mental activity even after the need for the same is over, gives rise to many problems. The elderly persons never approve of the action and activity of the younger generation for example, visiting movie for recreation, inter-caste marriages, dispensing with the old customs etc.

Innovations sometime are pictured as disruptive force stalling the status quo. Such a conceptual position impedes the implementation of innovations.

Very often it is felt difficult to start something new in schools, because many schools, teachers

and administrators view educational innovation or new practices as fads that will pass off if they are ignored. Educational systems are more resistent to innovations than industrial or business enterprises, and teachers are less receptive to change than farmers or physicians.

Miles (1964) argues that permanent systems whether individuals, groups or organisations, and institutions find it difficult to change themselves. He says that 'the major portion of available energy goes for carrying out routine operations and maintenance of existing relationship within the system. Thus, the fraction of energy left over for making diagnosis, planning innovation for deliberate change and growth is ordinarily very small. The tendency for all institutions and organisations is to maintain a state of equilibrium which is perhaps one way of preserving identity, character and culture.

Self renewal implies attention to dead woods and seed beds (Gardener 1964). The self renewing organisation also grows old and is producing dead wood. The seedlings are the new ideas, new ways of doing things and new approaches. Courage, high motivation, impatience with empty forms, versatility, openess, flexibility, organising for freedom, and systematic innovation are the conditions for self renewal, which are seldom found in practice.

Most organisations have a preference for stability though they have some mechanism for change arising from without. However they too at times launch new ventures. More often the educational authorities are trying experimentally in a competitive manner just to demonstrate that they are 'with it'. Majority of such experiments are dropped in the middle, when the spirit of competition subsides. This is so because individuals as well as institutions are swayed more by traditionalism and dogmatism than by progressivism. Deep-rooted conventional or conservative concepts induce people to always maintain the status quo and never change even the least that is possible.

We cannot know whether a process of comprehensive change is under way or not. In the past the appearance of change has been no more than a mask behind which systemic rigidities endure. Each person - however strongly he might favour change - has found that having risen by following the rules of the system, he becomes captive to it. (Mc Farlane 1985)

Institutions are generally formalised. Any formalised institution by its very nature will resist change. Resistance is the line of least effort and so institutions that are acting as organisms will resort to resistance of innovations.

Toffler (1974) holds the view that today's schools are too past and present bound.

SECTION III - TEACHER AND INNOVATIVENESS

1.9.0. THE INNOVATOR CHARACTERISTICS

Innovators are rarely popular people, says Morrish, for their merchandise is concerned usually with the untried and they tend to be regarded as individuals who are opposed on principle to the present order of things.

In his compendium of case studies, Miles has described the innovative person as strong, benevolent, high in intelligence and verbal ability, less bound by local group norms, more individualistic and creative, revealing authenticity and enthusiasm when attempting to persuade others, frequently rebellious, alienated excessively, always idealistic, and prone to resentment, resistance and defiance in the face of adversity and disillusionment.

Kats (1971) has categorised the innovator as one with a 'modern' orientation willing to take risks, one who has a belief in scientific knowledge, in the scientific approach and in objective, impersonal sources of information, besides a sense of personal competance and faith in his own capacity to control the environment

in contrast to one with a 'traditionalist' orientation which places more trust in friends and family opinions than in scientific evidence and is prone to fatalism and conservatism.

Rogers and Shoemaker, in their book 'Communication of Innovations' (1971) present the following generalisations concerning innovators: (1) Innovators are generally young: Rogers feels that younger people are free from conditioning by traditional practices. However, Lippitt finds educational innovators to be both young and old. According to him, young teachers are more potential 'Innovators' while the older ones are potential 'adapters.' (2) Innovators have relatively high social status': This applies to the education, prestige ratings and income of the innovators. (3) Impersonal and Cosmopolite sources of information: These are important to innovators. They seek information from the mass media and other impersonal sources outside their immediate social environment. (4) Innovators are cosmopolite: They tend to be wide travellers and are willing to participate in matters beyond the parameters of their system. Ross says that teachers in the more innovative schools usually acquire new ideas from outside their own community. (5) Innovators exercise opinion leadership: As a result of their prior experience, innovators are in a position to influence the adoption

decision of their peers. (6) Innovators are likely to be viewed as deviants by peers and by themselves: An innovator, says Schon (1967), sees himself as a man of strong will, attracted to risk, set against the established order with great energy and capacity to invite and withstand disapproval.

1.10.0. TEACHER AS INNOVATOR

The innovative teacher is one who by habit and conviction, constantly thinks unconventionally, is open minded, is sympathetic, always curious to know, to enrich, to evaluate, to try on the experimental base the new ideas and ideals and thereby to execute and diffuse them to one's utmost capabilities for the purposeful growth of his profession (Rogers, Shoemaker 1971).

Lippitt (1958) in his discussion of the teacher as 'Innovator', seeker and sharer of new practices, notes that teachers are more inclined to be involved in the diffusion process of innovation, if they feel that they have the authority to direct their own class room life and are at the same time confident that they can do correctly.

The teacher like any other member of the society plays a multiple social role in consonance with the status he occupies both in his private and public life. But the nature of teacher's occupation places him in a

special position of having a complicated set of roles in connection with his professional position. On the one hand he plays an academic role concerned with scholarship of students. On the other hand, he is a character-trainer concerned with development of students' whole personality. According to Ottaway(1968) the teacher is (i) an academic specialist; ii) a methodologist or pedagog; iii) a character trainer; iv) a member of school staff and v) a member of the society:

The teacher plays a very significant role in the school. He is a representative of the society; he is a judge who judges the achievement of the pupils; he is a source of knowledge and skills and he provides guidance for pupils; he also settles disputes among pupils; he discovers rule breakers; he is a person whose traits are imitated by children; he helps pupils to control their impulses; he also helps to develop confidence in themselves; as a group leader, he establishes the climate of the school and of the class; he is a parents' surrogate; sometimes he becomes a target of pupils' hostilities; but often he is an object of affection and love; hence he has to be open, flexible and change prone according to the pulse of the moment (Hozle 1969).

The teacher is expected to know his subject and be the acknowledged superior to his students in this respect. In the higher forms of educational institutions,

the importance of the teacher depends upon knowledge in special subjects. Otherwise, he may lose both social and intellectual prestige.

The teacher is the backbone of the entire educational system. It is he who contributes much for any reform in education. The modern teacher has to play a very active role, and never a passive one, in widening the horizon of the students' world of thought, word and deed. He must kindle an awakening in the learner that leads to the opening of the flood gates of knowledge, inventions and discoveries.

Good teachers are those who are skilful in developing understanding of the world in which man lives, insightful with respect to the ways and means of stimulating intellectual appetite while poor teaching would be a significant contribution to the perpetuation of ignorance, misunderstanding and intellectual and cultural stagnation (Ryans David 1969).

The task of the teacher now is that of a transformer, but he can never transform others unless he himself is transformed first. Every teacher should bear the brunt in bringing about positive changes in all aspects of the system of education, academic as well as administrative. Hence, it is imperative that the teacher is innovative so that he may not be out of tune with the

changing times.

It is the teacher who has to be in the vanguard in this enormous task of nation building. 'Teacher makes the man who makes the nation.' This adage is apt as it brings home to the teacher, the need to have a novel outlook and a new approach in the performance of his duty.

In advanced countries, the educational scene is marked by rapid changes in educational practice and programmes of action as well as innovations that are being introduced in the entire educational system, at such a high speed that James Ross has observed,

> Education reporting today is very much like snapping a photo of a moving object; by the time, the shutter has clicked, the picture has changed.

All over the world, educators are much concerned about 'teacher effectiveness.' A teacher can be effective if he keeps himself abreast of modern trends and techniques in teaching. It is essential on the part of the teacher to have a longing for novelty. Action for change is directed primarily towards improving and expanding what already exists. It is an effort to achieve more and better than at present. It is an endeavour to maximise the output, and minimise the effort and cost.

One of the major challenges to education, today, is the rapidity with which schools must adapt themselves to changing social conditions. Our society is undergoing progressive transformation. Educational system must be in tune with this onward movement which is gaining momentum. Hence, concerted effort is being made to introduce new ideas, new programmes, new rules and new techniques and strategies which constitute educational innovations. Since the rapidly changing society with increasing needs is placing greater and greater demands upon our educational system, it is but natural that innovative programmes alone enable the teacher to rise to the occasion.

The task of the teacher has become more challenging due to knowledge explosion in the realms of science and technology. The speed with which the teacher's role is undergoing a change because of the forces that are at work in reshaping the programmes and procedure at schools should be a matter of vital concern to the teacher.

That is why the National Policy of Education - Challenge of Education; A Policy Perspective (1986) clearly states: "Teacher performance is the most crucial input in the field of education. Whatever policies may be laid down, in the ultimate analysis

those have to be interpreted and implemented by teachers. We are on the threshold of the development of new technologies likely to revolutionise teaching in class rooms." For this the policy envisages an educational system in which "Teachers should have the freedom to innovate, to devise appropriate methods of communication and activities relevant to the needs, capabilities and the concerns of the community". (National Policy on Education - 1986).

1.11.0. CHAPTERISATION

This research report comprises five chapters. The first chapter is a conceptual frame consisting of a discussion on Education as instrument of change, School system and Social change, Conditions compelling change, Educational change in India, Teachers' role in educational change, change at Secondary and Higher education levels, Nonformal education, Definition of Innovativeness, Planning and Introduction of Innovations, Innovations in the present context, factors conducive to Innovativeness, Factors impeding Innovativeness, Innovator Characteristics, and Teacher as Innovator.

The second chapter is the review of related literature. Besides an introduction, studies conducted in other countries as well as those conducted in India are reviewed in this chapter along with a few generali-

zations based on the review and the relevance of the review to the present study.

The third chapter contains the details regarding the research design, statement of the problem, significance of the study, definition of terms, aims and objectives, hypotheses formulated, description of the components of the tools selected for the study, pilot study, the sample, collection of data, the variables, the scoring procedure and the scheme of analysis and interpretation of data.

The fourth chapter presents a detailed analysis as well as interpretation of the data in respect of samplewise analysis, variablewise analysis, Dimensionwise analysis, and Componentwise analysis.

The fifth chapter is the summary of findings and conclusions. Besides an introduction it includes the review of the research conducted, the major findings and conclusions, recommendations based on the research, as well as suggestions for further researches to the study of Teacher Innovativeness in Tamilnadu.

1.12.0. CONCLUSION:

The first chapter, being a conceptual frame to the study of Teacher Innovativeness in Tamilnadu, presents a brief theoretical discussion as an introduction

to the problem chosen for the research. It highlights the imperative need for change as an essential ingredient of educational endeavour. As the teachers' role in educational change in India is of paramount importance the teacher has to be an innovator par excellence in the educational system.

The future of India is being shaped and even deshaped in our class rooms at the hands of about 3.5 million teachers, most of them tradition bound but a few of them innovative. Innovative teachers, no doubt, constitute a small minority and yet they are the ones who really matter.

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