## Details of Module and its structure

| Module Detail | |
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| Subject Name | Education |
| Paper Name | Perspectives and Issues and Research in Teacher Education |
| Module Name/Title | Research Scenario of Teacher Education in India |
| Module Id | e-PGEDN 10.20 |
| Pre-requisites | The Prospective teacher educators have preliminary understanding of research & development |
| Objectives | After going through this topic the learners will be able to:<br>• explain the research scenario in teacher education<br>• identifies list of issues related to research & development<br>• spell out the possible solution of the identified issues<br>• know the criteria for assessment of teacher education institution<br>• analyze and frame research agenda for particular research<br>• discuss the process of professional development of teachers |
| Keywords | Teaching proficiency, predicators, organizational climate |

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## 1. Introduction

Educational research is the scientific field of study that examines education and learning processes and the human attributes, interactions, organizations, and institutions that shape educational outcomes. Research and Development go together always; Research leads to development and development to Research. The changing practice of education, schooling, teaching-learning, and evaluation made the educational researchers active and educational research alive. Presently we find the poor research scenario; Research in education is replicate and repetitive devoid of freshness, either of problem or of approach or of methodology. The national agenda for research needs to be developed in alignment with the developmental objectives. A prospective plan for research and innovations should be framed with regional and national developmental priorities. The research methodology must be compatible with the local problems. There is a need to be innovative. Regulatory mechanism to tone up the research quality needs to be evolved.

## 2. Research: meaning and need

It is the search for Knowledge. Human beings are the unique product of their creation and evolution, Human beings began to observe the nature, universe and all cause and effect relationships, started thinking on it, raised questions, tried for searching the possible answers; this is how the Research began unsystematically. It was only when people began to think systematically about thinking the era of logic began. This approach of reasoning can attribute to Aristotle and the Greeks. Research is includes the creative work undertaken on a systematic basis, in order to increase the knowledge. The Etymological meaning of research is derived from Middle French “recherche” this means “to go about seeking”. According to Creswell Research is a process of steps used to collect and analyze information to increase our understanding of a topic or issue". It consists of three steps: Pose a question, collect data to answer the question, and present an answer to the question.

## 3. Research Scenario of Teacher Education in India

India has one of the largest systems of education in the world; teacher education is not an exception. According to the changing school context and its demands, there should be changes

and developments in the teacher education system. Hence both School education and Teacher Education are symbiotic in nature. The development needs research. In India large number of research in education is the stereotypic. There are less innovations, a large number of surveys have been conducted but the generality is less found. Less research on Philosophical and historical studies. There are mismatches between research trends & problems; there is a need to evolve research quality indicators. There are less researches on connecting the teacher education and school education, the culture for creation, construction and incubation of ideas is missing. So altogether Educational Research needs Innovations, needs indigenous methods and needs quality research. Is it feasible and worth to explore the existing? Yes, it is. But, it demands perspective, passion, dedication and culture. Research is mostly wanting in, both, natural and social realm. Most of the present day Science & Mathematics laboratories merely replicate than innovate. India feels proud of its past glory, but, at present Science and Mathematics, both, have lost their identities. Social Sciences are surviving on the borrowed methodology from other Sciences, which are largely not suitable. Similar is the status of other disciplines. There is a fall in our economic growth, because, our Social and Political institutions are not properly located. Our political hub, Educational hub and Economic hub all are centered in the capital. Solution to all the problems resides at Delhi.

The latest creation of Indian Higher Education is Academic Performance Indicators, mostly, known by APIs amongst the Academic Community. As a result there is evident chaos in the field. Those interested in doctoral work are lost in the research course work, suitable or not, but made mandatory. Teaching is mainly text book based, not research based. Our research problems are borrowed. So is the status of research methodology. Our research product is published and marketed by foreign publishers at such a high price which is usually not bearable by us. Thanks to the "Shodh Ganga" which has recently originated in India. With the invention of Academic Performance Indicators many a e-publishers have appeared in the virtual world, with ready ISSN. Earlier the authors used to seek the publishers, now the publishers seek the authors. With the implementation of some of the recommendations of the 6$^{th}$ Pay Commission, in the State Universities, there is abrupt cut in the Teaching & Research Staff positions, justifying it on the bases of increase in work load. Is not it blowing the theoretical framework of teaching,

mechanically. Which school of thought has recommend the increase in work load? Can education be purchased with coins? Bricks, stones, cement, computers and white boards do support education. Buildings do facilitate education. Machines cannot replace humans. Money cannot replace men. It is humans & humans only who can formulate and address problems. The credibility of the Cambridge Press & Oxford Press is well established. But, if we are genuinely interested in publication and dissemination, we need to strengthen the Indian Press. We need to enhance the fidelity & testimony of Indian Research & Researchers, Indian Press and Publishers. The present paper attempts to preface the present Research focusing on Faculty Crunch in Indian Education System, Philosophical Foundations, Historical Foundations, Sociological & Psychological Foundations, Expectations with respect to Teacher Education Parameters, Innovations in Teacher Education, ET & ICT in Education, Language Learning, Teaching Methods, Educational Evaluation, Environmental Education, Human Rights Education, Life Skills & Value Education, Population Education, Technical & Vocational Education, Art Education, Special Education, Educational Management & Administration, Taxonomy of Educational Skills, Research Methodology in Education, and Research Thrust in Education.

### a. Faculty Crunch in Indian Education System

The Indian Education System from school to Higher Education, including IITs and IIMs is plagued by a massive manpower crunch. In school education, poor performance of big States is affecting the national picture. In the case of higher education, 42 Central Universities with sanctioned faculty strength of 16,602 have 6542 vacancies. Fifteen IITs have 1611 vacancies against the total strength of 5092 faculty positions. Thirteen IIMs have to fill 111 vacancies out of 638 positions. Four Indian Institutes of Information Technology have almost 50% vacancy as 104 out of 224 positions are vacant. National Institutes of Technology across 30 states have 1,487 vacant of the total 4,291 positions. Even less than a decade old Indian Institute of Science Education and Research with five branches has been afflicted with faculty crunch- 131 vacancies out of the total strength of 518. But it is the School Education that is facing the real heat. Throughout the country there is a vacancy for 12.59 lakh teachers in primary and upper primary schools. Uttar Pradesh leads the way with 3.12 lakh vacancies against the sanctioned strength of 8.18 lakh. Bihar has not been able to fill 2.62 lakh teaching positions, whereas West Bengal has

1.8 lakh vacancies. For its size, Chhattisgarh has 62,466 vacancies. Madhya Pradesh has 89,000 vacancies, Gujarat (11,695), Karnataka (18,253), Delhi (10,074), Andhra (15,379) and Kerala (3,013). The consultative committee dealt with the issue of proposed national mission on teachers and teaching. The committee was told about two specific proposals by UGC on teacher training. (The Times of India, Ahmadabad, Saturday, August 4, 2012).

There is growing void & vacuum in the State Universities. Persons have been serving as temporary lecturers, Temporary Teaching Assistants year after year in the State Universities. Posts are not filled after superannuation. There is abrupt cut in the Teaching & Research positions. Even when the positions are sanctioned by the Centre there is no State concurrence. Do we really have a united Nation of United States?

**b. Philosophical Foundations**

A number of studies were conducted during the recent past, on Educational Implications of the Sikh Guru Bani (Jasbir Kaur, 1998, Guru Nanak Dev University, Amritsar; Gurpal Singh, 1999, Punjabi University, Patiala), Bhagvad Geeta (Subhash Chandra Panda, 2004, Berhampur University, Berhampur; Sunita Singh, 2006, Dr. Ram Manohar Lohiya, University, Faizabad), Gram Geeta, (Shobhna Purushottam Saoji, 2006, Sant Gadge Baba Amravati Vidyapeeth, Amravat), and Hermann Hesse's Philosophy (Alka Mecwan, 2008, S.P. University, Vallabh Vidyanagar) and other Philosophers. Doctoral studies have been conducted in India on Sankhay Philosophy, Life and Work of Dr. Babasaheb Ambedkar, Sakhi of Saint Kabir, Educational Ideas of Pandit Deen Dayal Upadhyaya and Madan Mohan Malviya, Philosophy of Mahatama Gandhi, Dev Atma, Gurudev Tagore, Teachings of Bhisma in Mahabharta, Gautam Buddha, Shri Panduranga Shashtri, Upanishad, OSHO of Rajnish, Sir Sayed Ahmed Khan, Yoga Vashishtha, Dr. S. Radhakrishnan, Shri Pandurang Athavle, Swami Vivekanand and Shri Aurobindo Ghosh, Ramakrishna Mission, Vinobabhave, Mahatama Jyotirao Phule, Chatrapati Sahu Maharaj of Kolhapur, Motibhai Amin, Maganbhai P. Desai, Guru Nanakdev Ji and Martin and Vedantic Model of Swami Rama Tirtha. Guru Arjun Dev advocated Guru as the pivot who can lead his disciples on the path of reality. His educational thoughts are deeply rooted in Indian Tradition to acquire self realization and self manifestation.

Truth, love, beauty and bliss are the four doors of the building of spiritual education. He advocated absolute purity, absolute love, absolute honesty and absolute unselfishness as the four pillars of the building of international understanding. Guruji advocated that evaluation is not the monopoly of the teacher alone. The children evaluate their work themselves. Basically the Sikh Gurus were idealists and their philosophy comes under the terminology of idealism. But their understanding of the problems and their solutions were realistic and practical. They always worked out solutions in the context of their social, cultural, ethical, moral, political and economic nature. Sikhism is basically a relationship of Guru (Teacher) and Sikh (Shish). Thus their philosophy of life has great relevance with respect to philosophy of education. The concepts put forth by Sikh Gurus with special reference to aims of education, curriculum, pedagogy, teacher, pupil, discipline, and teacher-pupil relationship are not merely theories but involve practical wisdom. The axiology of Sikh Gurus emphasizes on value oriented education, which is the main construct of individual's character. The trio of their value system is 'Nam Japna', 'Vand Chakna' and Kirt Karni'. The metaphysics of Sikh Gurus involves the root of reality. What is true is real and what is real is true. They suggest a honest life with complete faith in Him. Sikh Gurus being great moral and spiritual teachers emphasized the cultivation of intellectual, aesthetic, moral and spiritual values in life. In the views of Sikh Gurus, it is essential that there should be overall development of man from mental, intellectual, moral and spiritual horizon. For a self realized soul, the entire cosmos is a manifestation of God. There is nothing more purifying on earth than knowledge.

The mundane man should go through Bhagvad Gita to liberate the self from Maya. Humanism is one of the important virtues of divine life. The platonic love is real love between souls to soul. Various educational and philosophical implications of Bhagvadgita are- The status of Guru is more than that of God. A teacher with sound personality and super character is the only ideal. The teacher is a Jyot and Jyotsana which enlightens the little ones. Guru Vedvyas provided divine power of sight to Sanjay. It flags a message that a teacher should provide insight to his pupils to awaken their conscience, so that, they are in a position to discriminate between Sin and Punya, Good and Evil. Every teacher should be a Friend, Philosopher and Guide for his learners

as Gita depicts through the association of Lord Krishna and Arjuna. The objectives of Education and Learning environment need to be designed in the light of Prigrah and Nigrah. Lord Krishna led the war not for the realization of his selfish objectives, but, for public welfare. The Shiksha of Gita is not for Arjuna only, but for, all times and all generations. Gita gives a shiksha of control of senses also. One can liberate oneself of Maya or illusion. Strong determination and faith are the keys to success. Karma with Bhagti has wonderful returns. Scietific Attitude, Gender Equity, National Integrity, Respect for all religions, Cleanliness, Humbleness, Sensitivity, Punctuality, Dignity of Labour, Patriotism are some of the values identified and confirmed from preaching of Gram Geetha. The text of the National Saint Tukdoji Maharaj in the form of Gramgeeta is its own testimony, for example, "Aggyananech Duravtey Pragati", "Dhan He Gribanche Rakt", "Shram Hi Gavachi Daulat", "Desh Dukhi Jnu Mazhechi Shareer". Hermann Hesse's Philosophy focuses on be, becoming, being and then de-becoming. Educational Philosophers are disappearing from the Indian Scene. As a result State & Judiciary have started dictating Education.

*How Philosophical foundations can be strengthened? We observe 11th of November as "National Education Day" for celebrating the Birth Anniversary of Maulana Abul Kalam Azad. Let all of us ask a basic question to our own self that to what extent we have been in a position to emancipate/ Azad ourselves from caste, creed, religion, region, relation in this secular State of India. To what extent we have been in a position to have democratic socialistic dialogues? To what extent we have been in a position to integrate naturalism of Gurudev Rabindranath Tagore to realize the liberty of learner? Where does the Viveka of Swami Vivekanada flow through our Education? Where is the Statesman, and Educational Philosopher of the class of Dr. S. Radhakrishnan to enlighten us? Let us Search & Re-Search.*

### c. Historical Foundations

From "Escola Normal" during the Portuguese Goa (1841-1961) to the proposal for e-Teacher Education (2008), India is a witness to variety of Teacher Education. The credibility of classical

Teacher Education is fully established. The land area, location, institutional plant, environment, objectives, curricula, learning resources, modes of transaction, evaluation modes and mechanisms, placement, renewal are talked of even today. But, there are question marks on the Present Day Teacher Education. Distance education has done the alarming harm to Teacher Education, being most deployed & diluted and least professional. Commercialization is a big threat to most of the traditional Teacher Education Colleges. None of the innovations in Teacher Education, such as, Longer period Teacher Education, Integrated Teacher Education, Personalized Teacher Education, Specialized Teacher Education could be institutionalized further. Either these have faded or are limited to the places where from these originated. There are rare Research Studies on the Historical foundations of Teacher Education. The benefits of decentralization and autonomy were well demonstrated by Escola Normal (Richard Cabral, 2007, Pune University, Pune). A study has been reported on the origin and development of Ancient India Universities (Amar Singh, 2008, Dr. R.M.L. Avadh University). The ancient Indian Universities, namely, Takshshila, Nalanda, Vikramshila, Vallabhi, Odantpuri, Jagdalpur, Kashi, Kashmir, Mithila, Nadia, Dhara, and Kannauj have a lot to offer regarding the Profiles of Acharyas, attributes and dedication of Learners, Curricula, Modes of Transaction, Examination and Evaluation.

The Autonomy of Education and Decentralization of Management were remarkable. The expertise and character of each Acharya was a focus of attention for students from far and wide. The profiles of the Dwar-Pandits and Top Administrators of the Universities are still on Records. Each Ancient Indian University was unique in specialization. It was a honor to be the Scholars of these universities. Each word spoken by the scholars was establishing the testimony of the text. Let us excavate the History. Even the remains have a lot to offer to the present Teacher Education.

### d. Sociological & Psychological Foundations

In this age of nuclear families we have added focus on pre-primary Education. There are rare programs on Pre-primary Teacher Education. In the age of two and a half years of a child, we are

struggling with the problem of first transition from home to pre-school. Scenario of the mental state of the child, parents, teachers and the support staff needs no demonstration. On the other hand we have "Anashrit Ashrams" for the old. There are problems of universalization of primary education. There are problems of Population Education. There are problems of adolescent education. There are problems of education at +2 stage. There are problems of medium of instruction. English language as a medium of instruction seems to be our biggest problem. There are gaps between teaching styles and learning styles. There are problems of Teacher Burnout and Rust-out. There are problems of degeneration of values and institutions. There are problems of teacher absence. There are problems of Para Teachers. Stress, strain, anxiety, tension, psycho-neuroticism are on the increase. There are problems of Education with mental, as well as, physical burden. There are problems of value conflicts and value clashes. Inspite of the pious hope of all round development of personality through wholistic education our society is turning from naturalistic, idealistic, and humanistic to existentialistic and pragmatist.

Higher is the administrative power one has, lower have been found the affect attributes. Social and Psychological abuse is on the increase. Value discussion models, Value Analysis Models, Value Clarification Models and Jurisprudential models have not been employed rigorously. Some studies on applied Psychology have been found to have desirable results in various areas of guidance and counseling. Attempts have been made to address learning difficulties, learning disabilities, psycho-neuroticism, problems of stress, strain, and burn out deviant behavior. Though the effectiveness is evident in some cases, but, the efficacy needs to be studied further, scientifically. There are wide gaps between School Education and Teacher Education. All of us are for child/ learner centered education. But even when we know that children are imperial, incorporative and develop their own theories, we go on superimposing our models on them. There are wide differences between the laboratory conditions of Teacher Education Institutions and the Field Conditions. The training needs perceived by most of the educational administrators and headmasters are related to maintaining appropriate human relations, stress management, conflict resolution and group dynamics. Students are in need of emotionally supportive teachers. Democratic environment is needed than authority and suppression. Studies on psycho-social factors of adjustment of school teachers gave a message to policy makers and administrators that

all attempts should be made for the compatible placement of teachers in the context of their service place and conditions. The high professionally committed teachers have been found to have high occupational stress as compared to low professionally committed teachers. High professionally committed teachers have been found to have high job satisfaction. Various Models of Teaching, such as, CAM, ITM, and AOM have demonstrated their effectiveness. Education Programs for enhancing emotional intelligence of student teachers were found to be successful in terms of raising the EQ levels.

*There are questions on Teacher Morale. There are problems of organizational behavior and organizational development. There are unhealthy staff constellations. There are challenges of Organizational Climate development. We teachers have wanting knowledge bases of child psychology, adolescent psychology and adult psychology. Behavioral problems are on the increase. There are value clashes. There are rare suitable inputs for the marginal groups. In this age of fast modernization there are problems of acculturation. How to realize equity, equality and excellence at the same time? There is a need to strengthen applied psychology and Modern Sociology.*

***Check Your Progress***

- *Higher is the administrative power one has, lower have been found the affect attributes. Reflect*

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- *List out the possible research areas in education with respect to Sociological and Psychological foundations.*

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- *What are the Social and Psychological Challenges faced by the learner from pre-school to higher education?*

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- *There are wide gaps between School Education and Teacher Education. Illustrate.*

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## e. Teacher Education Parameters: Expectations

### i. Field Expectance & Relevance

Doctoral studies have been reported on the Field Expectance & Field Relevance of Teacher Education Program (S. Mann, G. Shukala, Banasthali Vidyapith, 2005), Teaching Competencies Expected and practiced (Jyoti Bawane, University of Mysore, 2001). There have been found wide gaps between the Expectations and Practice.

### ii. Job Satisfaction of Teachers & Performance

Numbers of studies have been conducted on Job Satisfaction of Teachers and their teaching performance and Effectiveness (Dharmendra Malik, MDU, 2005; J.Kaur, KUK, 2004; K. Venketeshwara Rao, Shri Venketeshwara University, 2002; I.V.R. Reddy, Andhra University, 2001). Job Satisfaction has also been studied with respect to Freezingness amongst Teacher Educators (M.Kumari, Gorakhpur University, 2005), values and attitudes towards teaching and teacher effectiveness (G. Singh, Punjab University, 2002). M. Verma (DAVV, 2002) conducted a study of job satisfaction of teachers in relation to Job Stressors, Role Commitment, Vocational Maturity and Social Intelligence. M.L. Sharma (PU, 2002) conducted a comparative study of Job Stress, Job Satisfaction and Adjustment of College Physical Education Teachers of Himachal Pradesh, Punjab and Union Territory Chandigarh. Studies have been reported on Job Satisfaction, Professional and Educational Interest, Creativity, Attitude towards Teaching of Teacher Educators at different Levels of Teacher Education (M. Kaur, PU, 2001). V.P. Pal (PU, 2001) conducted a study of Job Stress, Job Satisfaction and Adjustment of Physical Education Teachers in Relation to their job placement. S. Khlai-UM (PU, 1999) conducted a study on Job Satisfaction and Job Dissatisfaction of dual factor theory in relation to personality types and self-concept of secondary school teachers of Thailand. A Mary Lily Pushpam (Bharthiar University, 1997) conducted a study on Attitude towards Teaching Profession and Job satisfaction of Women Teachers in Coimbatore. P.R. Manjula (Bhartihar University, 1995) has done an intervention into the job satisfaction of Higher Secondary School Teachers of the Coimbatore district of Tamil Nadu State. A Hamid (MDU, 2002) conducted a study of the Accountability of Secondary School Teachers in Relation to their Job Satisfaction and Morale. B. Shrivastava (University of Lucknow, 2002) conducted a study of Mental Health, Values and Job Satisfaction

among Teachers of Hindi and English Medium Schools. A synthetic view presents that there are problems of mental health, job dissatisfaction, and job stress.

### iii. Influence of Psycho- social Factors in Teaching

Studies have been conducted on the influence of certain Psycho-Social Factors in Scholastic Achievement of B.Ed. Students (C. Manchala, Shri Venketeshwra University, 2005). S.S. Chahar (MDU, 2005) has conducted a study of teaching competency of Student-teachers in relation to certain non-cognitive variables. S. Shaik (Shri Venkateshwara University, 2004) conducted a study of Academic Achievement and Prevalent values of DIET students in Andhra Pradesh. K. Joshi (Gujarat Vidyapith, 2003) conducted a study on the Teaching Aptitude of Higher Secondary School Teachers of Gujarat State in context of some Psycho-Social variables. N. Bhargava (Bundelkhand University, 2003) conducted a study of personality characteristics, values and SES of Pupil Teachers in relation to their attitude towards social change. G.P. Raval (Saurashtra University, 2003) conducted a study on Approaches of coping with stress factors and Teacher Performance. A Study was conducted on Social Intelligence and Teacher Effectiveness (R. Agrawal, Bundelkhand University, 2003). V. Goswami (Banasthali Vidyapith, 2003) conducted a study on Effect of Participatory Teacher Education Programs on the Conceptual Development and Self Development of Student Teachers. G. Pareek (PU, 2003) conducted a study on the Effect of Relaxation Technique on Job Stress in relation to Blood Pressure, Hypertension and Heart Rate in Women Teachers. M.S. Chonakwar (Dr. B.R. Ambedkar University, 2002) conducted a study of personality characteristics of scheduled castes and non-scheduled castes primary teachers in relation to their classroom adjustment attitude towards teaching. K.K Tripathy (PU, 2002) conducted a study of Role Structure and Role Stress in Relation to Work Satisfaction of Primary School Female Teachers in Orissa. Y.K. Anand (PU, 2002) conducted a study of Role Efficiency of Polytechnic Teachers and its relationship with personal and organizational characteristics. K.D. Patil (SNDT Women's University, 2002) conducted a study of Teacher Performance of Junior College Teachers in relation to some Personality Dimensions. R. Balu (SNDTWU, 2001) conducted a study of the role performance of Teacher Educators in Relation Their Profile. M. Pal (PU, 2001) conducted a comparative study

of attitude of School and College Teachers towards Creative Learning and Teaching in relation to Mental Health.

A Khaleque (PU, 2001) conducted a study of Burnout in Relation to Self-Concept and Introversion-Extraversion among Elementary School Teachers in Assam. R.Rao (MSU, 2001) conducted a study- Development of an In-Service Training Program for Navodaya Vidyalaya Teachers in Meeting Students Emotional Needs. K.S. Shakunthala (Bangalore University, 2001) conducted a study of the adjustment of Secondary School Teachers in Relation to their Teaching Competency, Emotional Maturity and Mental Health. J. Kaur (PU, 2001) studied Mental Health as Related to Vocational Maturity of Male and Female Prospective Secondary School Teachers. G. Yadagiri (Osmania University, 2000) conducted a comparative study of Professional Attitudes and Teacher Effectiveness among Physical Science Teachers of Ranga Reddy and Medak districts of Andhra Pradesh. A.H. Kulkarni (Shivaji University, 2000) conducted a comparative study of Male and Female Secondary School Teachers with respect to their Personality Traits, Competency and Teaching Effectiveness. Psycho-social factors have largely been found affecting teaching in India adversely.

**iv. Attitude Towards Teaching**

S.K. Gupta ( Baraktullah University, 2000) Compared Creative and Non-Creative Secondary School Pupil Teachers Of Madhya Pradesh in Relation to Values, Adjustment and Attitudes towards Teaching. D.T. Reddy (Mysore University, 2000) conducted a Critical Study of the Professional Pleasure in relation to Creativity and Change Proneness among Secondary School Teachers. D. Baland (MDU, 1999) has done an investigation into the Study Habits, Reading Interest, Attitude towards Teaching and their bearing upon the achievement of the pre-service teachers. S. Patanrasd (SPU, 1998) conducted a study of the Attitude of Student Teachers towards the Teaching Profession and Globalization with reference to certain variables. A.M. Reddy (Osmania University, 1997) conducted a study of the attitudinal changes among the pre-service teacher trainees towards the teaching profession. There are attitudinal changes towards the teaching profession through pre-service teacher education. Creativity and change proneness definitely contribute to professional pleasure. Inspite of all the impeding factors there is

professional commitment and favorable attitude of Indian Teachers towards teaching. The entire globe likes to emulate Indian Teachers.

### v. Classroom Teaching Effectiveness

S. Chawla (MDU, 2005) conducted a study on Interactional Analysis of Classroom Behavior of Effective and Ineffective Hindi Teachers. R. Pareek (Banasthaly Vidyapith, 2005) conducted an analytical study of Computer Curriculum in Teacher Education Program. S. Singh (MDU, 2005) studied the effect of Classroom Questioning Behavior Training on Teaching Competence of Student –Teachers and their Self-Concept. V. Upadhyaya (Dr. B.R. Ambedkar University, 2005) conducted a comparative study of the impact of the Teachers' Training on Self-Concept, Attitude towards Teaching and Values in Self Financing and Government Aided Institutions. P. Mishra (KUK, 2004) conducted a comparative study of classroom verbal behavior of Student-Teachers and In-Service Science Teachers of Secondary Schools. V. Singh (University of Lucknow, 2004) studied the effect of B.Ed. Training Program on Teaching Competency of Pupil-Teachers.L.K.M. Baburao (Andhra University, 2003) conducted a study of DIETs, CTEs, and IASEs with special reference to NPE 1986. S.P. Shukla (Gujarat Vidyapith, 2003) studied the effectiveness of Video Programs with Discussion, without Discussion, and Traditional Methods on the Achievement of Student-Teachers in context of some variables. Padmini P. Rani (Avinashilingam Deemed University, 2003) developed oral communication efficiency in English B.Ed. Trainees. R. Chandra (PU, 2002) focused on sustainable changes relevant to community and school needs in curricular input and transactional modes of elementary teacher education.

A study on the effect of the learning inputs provided in Teacher Education Program on Teaching Efficiency of Teachers was conducted by A. Goel (Banasthaly Vidyapith, 2002). V. Vohra (KUK, 2002) proposed a Prospective Training Model after identifying training needs of Secondary School Language Teachers. K Jayaramanna (Andhra University, 2001) conducted a study of teacher effectiveness in relation to work orientation and achievement of students at Primary Level. S. Devi (MDU, 2001) studied the effect of Classroom Questioning Behavior Training Using Games on Teaching Competence and Pupils' Achievement. J.K. Suhag (MDU, 2001) has done Interactional Analysis of Classroom Behavior of Effective and Ineffective

History Teachers. M.S. Bhatt (Gujarat Vidyapith, 2001) conducted a study on Primary Education Trainees' Perceptions of Teaching. R. Balu (SNDT, 2001) conducted a study of Role Performance of Teacher Educators in Relation to their Profile. M. Singh (Dr. B.R. Ambedkar University, 2000) conducted a study on identification and comparison of Language Skills for Hindi and English Teachers of Secondary School Level. D.T. Reddy (University of Mysore, 2000) conducted a critical study of Professional Pleasure in Relation to Creativity and Change Proneness among Secondary School Teachers. S. Kher (DAVV, 1999) conducted a case study on Development of Need Based Programs for Pre-Primary Teacher Education. A.K. Shrivastava (Dr. B.R. Ambedkar University, 1999) conducted a comparative study of the effect of Training on Teaching Attitude and Self Concept of various Types of Trainees under DIET Program. Baiju K. Nath (University of Calicut, 1998) developed self instructional package for secondary school Biology Teachers for their In-service Learning. H.B. Jani (Bhavnagar University, 1998) studied Secondary Education Trainees' Perceptions of Teaching. Mamta (Shri Shahuji Maharaj University, 1998) explored factors of specific training needs of Lady Teachers in Primary School. U. Sharma (MLS University, 1993) conducted a study on Crystallization of Professional Values among the Teachers of Higher Secondary Schools in Rajasthan. A large number of Educational Instruction Interventions have been reported to be Effective.

### vi. Predictors of Teaching Proficiency

G Londhe (Pune University, 2003) studied the Teaching Aptitude of Student Teachers with reference to Creativity and Teaching Competency. C. Shekhar (Bundelkhand University, 2002) conducted a Study of the Locus of Control of Pupil Teachers Admitted on Weight age of Bundelkhand University in Relation to their Future Teaching Effectiveness. D. Baland (MDU, 1999) has done an Investigation into the Study Habits, Reading Interest, Attitude towards Teaching and Their bearing upon the Achievement of the Pre-Service Teachers. N. Kumari (PU, 1999) has conducted a study of Entrance Tests and Measurement Performance of B.Ed. Trainees as related to Psychological and Socio-Demographic variables. D.K. Diwan (MDU, 1993) conducted a study of the predictors of Academic Achievement of Student Teachers in terms of Aptitude, Attitude, Participation and Human Values. All these studies have contributed to the

knowledge base significantly, but, there is a need to work out the admission criteria into various Teacher Education Programs still systematically.

### vii. Organizational Climate & Teaching

S. Awasthi (Bundelkhand University, 2002) conducted a study on Teacher Alienation, their Morale and Principal's Leadership and Institutional Effectiveness in different Intermediate Colleges on the Basis of Organizational Climate. A. Day (Bundelkhand University, 2000) studied the Teachers' Professional Values, Family Relationship and Anxiety in Relation to Organizational Climate. R.M. Ghatel (SNDT, 1999) conducted a study of Teacher Performance and Job Satisfaction of Teachers in relation to their Maturity, Locus of Control and Organizational conflict. N. Singh (Jai Narayan University, 1999) conducted a study of Senior Secondary Schools of Jodhpur Division in terms of Organizational Health and Teachers' Attitude towards Teaching Profession and Adjustment. There is a need to develop Healthy Organizational Climate for Effective Education.

***Check Your Progress***

- *Do you agree that there are wide gaps between the Expectations and Practice in Teacher Education? Justify your stand*

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- *What are the sub-areas where the researches in Job Satisfaction of Teachers & Performance have been done and what is the research synthesis?*

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- *Psycho-Social factors have largely been found affecting teaching in India adversely. Support with the research base.*

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- *The entire globe likes to emulate Indian Teachers. Why?*

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- *Why there is a need of research on Classroom Teaching Effectiveness?*

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- *What are the Predictors of Teaching Proficiency?*

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- *Does the organizational climate catalyze effective education?*

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**f. Innovations in Teacher Education**

Teacher Education has experienced Micro-Teaching, Model- Teaching and Techno-Pedagogy. The innovation of Micro –Teaching has been institutionalized across India, Model-Teaching appeared and disappeared at demonstration level, whereas, Techno-pedagogy is in infancy. Personalized Teacher Education appeared in one form or the other (DAVV, Indore, Banasthali, Lucknow University). A large number of visitors visited these Personalized Teacher Education Programs, appreciated, but none institutionalized in their institutions. Participatory Approaches to Problem Solving have been effectively demonstrated in Classroom. Attempts have been made by the Intel Teach to the Future in integrating ICT in Teacher Education at pre-service and in-service levels. Intel has been organizing training programs to orient the pre-service and in-service teachers with sizable inputs. The Regional Institutes of Education of the NCERT have been offering B.A./B.Sc./Ed. and M.A./M.Sc./ Ed. integrated programs of Teacher Education. Also, the RIEs have been offering Two year integrated B.Ed. Program. The Zakir Hussain Center of Education, Delhi University has been offering 4 year integrated program for primary teachers. A 2 year PG Diploma in Educational Technology proposed by one of the PG Departments of Teacher Education in India has been approved. Also, a two year integrated M.Ed. Program has been approved. Modular integrated Teacher Education Programs for Higher Education and e-Teacher Education Program have been formulated by some of the institutions. Numbers of Innovations are evident in Evaluation, such as, Choice Based Credit System, Electronic Distribution of Examination Papers (EDEP), On Demand Testing, Automated Testing, Double Valuation, Testing of Affect Attributes. Progressively there is a shift to Total Internal Evaluation Based Semester System. Teacher Education is progressively integrating such practices in Teacher Education Curricula.

*The question of formulating norms and standards arises when the institutions apply to institutionalize or replicate these innovations.*

***Check Your Progress***

- *What are the main areas of contemporary innovations in Teacher Education?*

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**g. ET and ICT in Education**

A sizable number of studies on effectiveness of CAI developed through various computer languages employing either pre-experimental design or quasi experimental design reveal significant mean score gain from pre-test to post-test. Studies on the effectiveness of CAI reveal favorable reactions of students and teachers towards the CAI. ( Prabhakr 1989; Himani 1990, Mahapatra 1991, and Adhikari 1992, DAVV, Indore; Khiwadkar 1999, Zyoud 1999, Yadav 2000, Goel Khirwadkar Tomar Das & Joshi, 2000, Macwana 2004, Sharma 2005, Barot 2005, Pradesi 2005, and Rathod 2005, MSU; Suwanna 2004, SGU; Upadhyaya 1999, MJP Rohilkhand University, Bareily; Sanjana 2001, MDU and Pandian 2004, DU) There have been found rare studies on the pedagogic/techno-pedagogic analysis of the computer based educational instructional programs. These studies reveal that there should be added focus on production variables, pedagogic principles and spatial and temporal contiguity of various message forms (Patel, 2001, MSU; Chaudhari, 2005, MSU). Computer as a medium has been found to have the potency of addressing the heterogeneity in terms of variables, namely, IQ, Interest, Motivation, Language level ( Zyoud, 1999, MSU). There are rare studies on effectiveness of CALM in various modes, namely, text, graphics, text & graphics, text, graphics & music. It has been found that the composite modes may not always ensure higher level of language learning (Das, 1998, MSU). Very few studies have been conducted on the relative effectiveness of CAI with peer interaction in mono, diad and triad (Pardesi, 2005, MSU). Attempts have been made for designing, developing and implementing computer based Learning Resources Management System (LRMS). The automated LRMS has been found definitely more effective than the manual LRMS (Beryah, 1995, DAVV). A few studies have been conducted on the relative predictivity of various variables with respect to the criterion variable, namely, Educational Proficiency (Mishra, 1993, DAVV; Goel, 2003, MSU).

A study conducted on Time Space Personnel Management System revealed that the computer based TSPM system was found relatively more acceptable and better functional than the manual TSPMS (Biswal, 1995, DAVV). Though studies have been conducted on the automation of examination system, yet these studies find rare expression at the functional level. Teacher Education Institutions need to promote Choice Based Credit System and on demand examination (Mahajan, 1993, DAVV; Joseph, 1993, DAVV; Shinde, 1993, DAVV; Goel, 1997, MSU). A sizeable number of teacher education institutions in India have initiated into ICT in Education either as a core course or as optional course. Inspite of the impeding factors, namely, limited staff, inadequate laboratories with maintenance problems, sizeable classes, the courses have been found to realize their objectives reasonably (Goel, Das, and Shelat, 2003, MSU). A sizeable number of teacher education institutions have been found lacking facilities, such as, Internet, MS Publisher, Acrobat Reader Goel, 2005, MSU). A few studies conducted on the use of Internet in Teacher Education Institutions revealed that the student teachers largely lack in info-savvy skills and techno-pedagogic skills (Joshi, 1999, MSU; Dhodi, 2005, MSU)**.** Some of the teacher trainees make use of Internet for surfing, e-mail, research, core courses and special areas. But, the Internet is rarely used for web designing, reflective dialogue and outsourcing. Measures of Internet safety are rarely employed. There is a need to develop Net-Savvy Skills in Teacher Educator Trainees (Goel, 2006, MSU). Some Studies have been conducted on bridging the gaps between teaching styles and learning styles. The studies are appreciable but there is a need to conduct many more studies Rathod, 2005, MSU). Studies conducted on language instruction through Power Point Presentations on realizing communicative and functional languages have been found to go a great way in establishing the effectiveness of learning various languages (Yadav, 2005, MSU; Rathod, 2005, MSU). There have been rare studies on developing language learning strategies and learner autonomy through weblogs. Blogs not only provide teachers with an exciting new way to approach communicative language learning, these also give students a new reason to enjoy reading and writing. Nayana Dhodi (2011) demonstrated very well how the info-savvy skills of Asking, Accessing, Analyzing, Applying and Assessing were developed in the Pre-Service Teachers of India through surfing on Cultural Heritage of India and Buddhist Heritage of India and the domains of their respective discipline methods. It is a joyful experience to travel through her doctoral Thesis experiencing various surfing skills, namely, skimming,

scanning, authenticating, hyper- linking, switching, skipping culminating into educational immersion for seeking solutions. *Educational Technology and ICT in Education have demonstrated their values. But, Technology in Education is not yet fully integrated. Technology in Education is still underutilized.*

***Check Your Progress***

- *What are the impeding factors for the integration of ICT in Teacher Education in India Justify*

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**h. Language Learning**

The Communicative Interactive Constructive Approach has been found more effective than Structural Approach, whereas, Structural Approach has been found to be more effective than Grammar Translation Approach. The media supported approaches have been found to be more effective than traditional conventional approach. Multi-lingual model of language instruction has been found to be more effective than Monolingual Model. Media Language Proficiency has been found to facilitate learning a great deal.

**i. Teaching Methods**

Study on evaluation of mathematics textbooks of V, VI, VII standards revealed that there is absence of continuity in chapters and lack of activity oriented exercises Jayshree R. Pai, 1997, MSU). Study on development of science education in Nagaland concluded that more than half the total number of the Science Teachers (57%) were of the opinion that objectives of Science Education were not clear to them and accordingly less achievement of objectives of science education (Khriesamhalie Pienyu, 2004, Kohima). The study on the Science curriculum transaction in secondary schools of Baroda city revealed that teachers are not clear with values of Science( P.S. Umashree, 1999, MSU). Student teachers are found to be more interested in using innovative methods of teaching the language than working teachers. English language teaching at school level is found to be suffering from lack of interest and attitude (Kshamata Chaudhary,

2002, VMOU). Use of inductive thinking model to teach Science at Primary level proved fruitful in developing the reasoning ability of students ( Kishorkumar K. Leuva, 2002, VNSGU).

### j. Educational Evaluation

Various studies under the section Educational Evaluation focused on remedial programs (Archana Srivastava, 2004, Vikram University, Ujjain), system of performance appraisal for teachers (Mohammad Abbas Ali, 2003, University of Mumbai, Mumbai), continuous and comprehensive evaluation (Puspanjali Pani, 2004, Utkal University, Bhubaneswar) and evaluation of teachers by students (Shrirang Baburao Kshirsagar, 2006, Pune University, Pune). Remedial programs developed to improve achievement have been found to be effective in bringing the results. Both B.Ed. Students and B.Ed. Teachers are of the opinion that Students' Evaluation of the teachers should be there, if taken positively and constructively. N.S. Rathod (Bhavnagar University, 1993) conducted a study on Application of Item Response Theory to Criterion Referenced Testing. J.A. Ramanuj ( Bhavnagar University, 1997) conducted a study on development and standardization of Criterion Referenced Mastery Test on Surface Tension, Capillary Action, and Viscosity in the subject of Science in Gujarati. Teacher Education should provide substantive inputs on CRT, IRT, and NRT strengthen Evaluation. M. Singh (Agra University, 1994) conducted a study of the differential effect of Anxiety on Performance in Progressive and Terminal Examinations.

A large majority of the candidates while taking examination are rarely normal because of the faulty examination system, be it admissions into the Educational Programs, Periodical Tests, or At End Test. Fear of Failure and Hope of Success keep disturbing the candidates. Could the Testing be personalized? S. Meera (Avinashilingam Deemed University, 1995) has done an Evaluation of the Total Internal Assessment System in the Avinashilingam Deemed University. The Choice Based Credit System & Total Internal Evaluation is highly desirable. K. Charate (Barkatullah University, 1993) has done an investigation into the causes of low achievement among Normal Children and attempted to design an appropriate curriculum and instructional strategies to tackle these. K.S. Vishwanathan (University of Calicut, 1997) studied the effect of Diagnostic Error Learning Strategy on the Achievement of Slow Learners of Standard IX in

Mathematics. K. Bose (JMI, 1996) studied the effectiveness of Computer Programs as Remedial Strategies for overcoming certain Learning Disabilities. Neela Shelat & Anjali Mehta (MSU, 2003) have done an investigation into errors committed by students of Std. VIII in writing Gujarati. Numbers of attempts have been made on construction and standardization of Tests in various areas. All these studies have definitely added to the knowledge base in the area of Educational Evaluation.

***Check Your Progress***

- Discuss the relevance & value of educational evaluation.

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**k. Environmental Education**

Video film on Environmental Pollution was found to be effective in eliciting students' positive response (Indubala U. Singh, 1999, SGU, Surat). Teacher Educators were found to be very positive towards Environmental Education ( Anu Radha, 2005, Punjab University, Chandigarh). The instructional Program on Environmental Studies facilitated the teacher in evolving teaching strategies for enhancing teacher-pupils interactions during the acquisition of process skills (N. Ramkumar, 2004, MSU, Baroda). Fr. Rayappan Irudayam, SJ. (MSU, 2006) conducted a Study on Development and Implementation of a Computer Based Multimedia Software Package to Enhance Environmental Awareness in the Students of Std. IX. The Environmental Education needs to be institutionalized in Teacher Education very intensively.

***Check Your Progress***

- *Discuss the status of research in Environmental Education in India.*

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**l. Human Rights Education**

A large majority of the Teacher Educators and Teachers & Learners are not aware of Human Rights. There is progressively some awakening in the field of Teacher Education. A curriculum has been designed on human rights education for the children below the age of 14 years (Swaranaprava Sahoo, 2002, Utkal University, Bhubaneswar). The programs designed,

developed and implemented on Human Rights and Child Rights have been found significantly effective (Mamata Sheth, 2007, MSU, Rucha Desai, 2007, MSU, respectively ). Childhood is so tender a phase that it ought to be fully respected and skillfully nurtured to realize its full bloom. Every child is the extension of man and a promise to sustain mankind. United Nations has worked to free people from economic poverty, slavery and servitude, disease and discomfort to lead healthy, happy, meaningful and full life. There are evident gains. But these gains are in doubt. Even now some ice-lands are captured and gatekeepers appointed to issue visa. Too many people are living in fear. Under economic recession highly competent people are in fear of losing their jobs. Respect for human rights demands not only awareness of human rights, but also, favorable attitude towards human rights. Human Rights Education ought to be integral area of Education.

***Check Your Progress***

- *Explain the importance of research in Human Right Education?*

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**m. Life Skills and Value Education**

Various studies in the section Life Skills and Value Education are focusing on aesthetic sensitivity, critical thinking, and value towards society, profession and family. Strategies developed for teaching critical thinking revealed that thinking approach can facilitate the student to understand and relate to the concepts through self-analysis, evaluation and judgment (Meghani, 1999, MSU). Some studies conducted on identification of deviant thinking patterns and clinical sessions thereof reveal that thinking patterns can change through counseling in a relatively short period of time. Cognitive counseling technique is useful in acquisition of desirable thinking (Goel & Joseph, 1994, DAVV). Induction program for teachers' classroom communication was found to be effective in improving interpersonal relationship, patterns of communication through transactional analysis training (Nyarondia Samuel Maragia, 2000, MSU). Gender and Religion have been found to influence value formation. Model curriculum developed for crisis management was found to be helpful in achieving results in a desired way and recommended for consideration of The NCERT, CABE and SCERT (Sainath Pandurang

Shenoy, 2005, Mumbai University). Sheetal Helaiya implemented a Life Skills Program on the Pre-service teachers during 2008-2009 at the M.S. University of Baroda, Vadodara and Gujarat India. Post-intervention scenario on the Life Skills of the student-teachers revealed that that there was a remarkable gain in their Self Awareness Skill, Effective Communication skill, Interpersonal Relationship Skill , Coping with Emotions Skill, Decision Making Skill and Problem Solving Skill. There was moderate gain in their Coping with Stress Skill, Empathy Skill, Critical Thinking Skill and Creative Thinking Skill. Neither have we fully known our strengths nor our weaknesses. Creative and Critical thinking Skills, both, in one is a rare combination. Life Skills Education and Value Education ought to be well integrated in Education.

***Check Your Progress***

- *Indian Students are programmed by the schools round the clock. Our Education is mechanized & lifeless. We have, surprisingly, introduced life skills education in school curricula? Is not there a paradox? Reflect*

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**n. Population Education**

The urban students have been found to have significantly higher knowledge of population education than rural students. The urban teachers have been found to have higher positive attitude towards population education than the rural teachers (Pradeep Kumar Agrawal, 2002, Rani Durgavati University, Jabalpur). K. Luthra (University of Jammu, 1996) conducted a study of Population Education Awareness of Teachers Working at Primary and Secondary Levels of Education of Jammu Province. Harshavardhan (Bundelkhand University, 1995) studied the Attitudes of Rural and Urban Teachers in the context of Population Education. R.S. Dakariya (Bundelkhand University, 1993) conducted a comparative study of Population Awareness up to middle stage and the Teachers trained by DIET in Bhopal.

**o. Technical and Vocational Education**

Two studies were reviewed under the section technical and vocational education. Both are comparing the educational status in different locations. Regarding comparative study of technical education of India and Germany, the findings revealed that the aims and objectives of technical education in India and Germany are same, except emphasis on profession and professional training in objectives of technical education in Germany. The vocational schools and University of applied sciences are autonomous. Vocational schools in Germany adopt statewide common curricula unlike in India which is common nationwide (Ajit Ram Rao Thete, 1999, BAMU). Another comparative study on vocational education interests of Urdu and Marathi medium students revealed that no significant difference was found between the mean scores on the vocational interest of the Urdu and Marathi medium students. The jobs related to household and social and scientific fields were preferred by most of the girls in the sample (Rahat Sultana, 2001, BAMU, Aurangabad).

**p. Art Education**

There are rare studies on Art Education. One study reviewed under the section 'Art Education' is on developing Art Education Curriculum for secondary level. The study reveals that problems are existing in the education system regarding infrastructure facilities, curriculum and its transaction. Struggle for naturalism is identified as one of the psychological needs of the adolescent group. The secondary students need, not only qualified faculty to teach the subject, but also facilities, opportunities to practice. Students were found to have developed a positive attitude towards the art education curriculum developed by the investigator (Parameswaran, O.P., 2001, MSU).

Deepak John Mathew (2005, MSU) conducted a study of the Development and Effectiveness of an Instructional Strategy on Color and Form for Design Education. This is an exploratory study, which proved to be beneficial to both students and the design teachers alike.

***Check Your Progress***

- *How Art Education facilitates development of universal beings? Substantiate.*

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**q. Special Education**

**i. Studies on the Mentally Retarded**

M. Bharathi (PU, 1993) studied the Psycho-Social Problems of the Mentally Retarted and the role of Self-Help Groups. G.F. Deshti (1995) conducted a study on the Relative Effectiveness of Training Techniques to bring out behavioral changes amongst Mentally Retarted. Rajam Pillay (University of Kerala, 1995) studied the effect of individualized training program on communication skills and certain associated variables in the mentally retarted. M.P. Anitha (University of Kerala, 1996) conducted a study of the dimensions of Teacher Effectiveness of the Mentally Retarted. R. Lal (SNDT, 1999) conducted an experimental study on inclusion of AAC System in the curriculum of Teacher Training in Special Education and its effect on Language Development of Children with Mental Retardation. M. Mann (KUK, 2000) developed an Educational Package for the Mentally Retarted Children. M. Sharma (MSU, 2004) developed and tried out an intervention program for parents of children with Mental Retardation. R. Pandit (MSU, 2008) conducted a study on Effectiveness of Behaviour Modification Techniques in Children with Mental Retardation. R. Sinha (University of Lucknow, 1993) conducted a study on the Education for the Rehabilitation of SPASTICS: Identification of Potential Learners and Dropouts among Cerebral Palsied (SPASTICS) Children: An Effort for Achievement of Human Potentialities.

**ii. Studies on Learning Difficulties**

L. Chaudhari (PU, 1996) conducted a study to Assess the prevalence of Learning Difficulties Amongst High Risk Early School Children.

**iii. Studies on Learning Disabilities**

H. Tahiliani (JMI, 1998) studied the effectiveness of Remedial Reading Program for the Learning Disable and Normal Children. A. Khanna (PU, 1999) studied the effect of Multisensory Instructional and Playway Approaches towards the remediation of Spellings in Science of the

Elementary Learning Disable Children in Relation to their Anxiety, Self-Concept and Locus of Control. I.B. Chughtai (Barkatullah University, 2000) conducted a diagnostic study of Learning Disable Children in Language at Primary Stage and Tryout of the Remedial Measures. S.R. Reddy (Osmania University, 2001) conducted Training and Rehabilitation Servicesfor the Persons with Disabilities in Andhra Pradesh. Pooja (KUK, 2004) studied the Arithmetic Error Profile of Learning Disabled Children for improving their Arithmetic Skills. S. Devi (PU, 2004) studied the effectiveness of differential Remedial Measuresto improve spellings of Fourth Graders with Learning Disabilities. M.R. Umadevi (KUVEMPU University, 1997) studied the effectiveness of a Remedial Program on improving Reading Comprehension Skills among Dyslexic Children. D. Chauhan (PU, 2004) studied the effectiveness of different Strategies for Remediating Discalculia in Primary School Children.

### iv. Studies on Visually Handicapped

R. J. Vyas ( Saurashtra University, 1995) conducted a study of certain Personality Traits of Blind Students as compared to Sighted Students. Neelam (KUK, 1997) conducted a study of Creative Potential of Visually Impared Students in relation to their Self-concept and Locus of Control. R.C. Mulwani (Gujarat Vidyapith, 1999) constructed and standardized a verbal group test of intelligence for the Blinds of Gujarat State for the age group 12 and above. Y. Chandra Mohan (Osmania University, 2001) studied the problems and needs of visually impaired students at Secondary Level in AP. V. Bharti (DAVV, 2001) conducted a comparative study of the food habits and appetite in relation to Nutritional Status of the Normal and Visually Handicapped children (Aged 8-12 years) of Indore District.

### v. Studies on Hearing Impaired

S. Shivji (MSU, 1995) has done critical appraisal of structural and functional aspects of Organizations for Hearing Impaired in Gujarat. B.B. Pandit (Bhavnagar University, 1996) developed a Basic Vocabulary in Gujarati Language for Hearing Impaired Children.

### vi. Studies on Physically Handicapped

N. Satsangi (PU, 1993) conducted a study of Adjustment, Self Concept, Alienation and Altruism in Siblings of Handicapped and Normal Children. L. Gurnani (M.L.S University, 1993) conducted a study of Life Values, Personality, and Creativity of Physically Handicapped Senior Higher Secondary Students of Rajasthan. S. Kamthan (Jiwaji University, 2002) conducted conducted a comparative study of Personality dimensions of normal and handicapped (Polio Affected) Children.

### vii. Studies on Autism, Deaf & Dumb

C.A. Reddy (Jiwaji University, 1993) studied the effect of Physical Education Program on Motor Behavior and Selected Coordinative Abilities of deaf and dumb students. V. Hema Nalini (Avinashilingam University, 2005) developed Psycho-Social Pedagogic Intervention Strategies for Autism.

### viii. Studies on other Special Groups

H.S. Shishodia (Agra University, 1993) conducted an analysis of the Psycho-Social Aspects of Enuretic Behaviour in Children. S. Kumari Hooda (MDU, 1993) conducted a study of Special Groups of Students in Classroom. R. Goenka (Guru Nanak Dev University, 1993) conducted a comparative study of Personality and Intra-Familial Relations of Delinquents and Non-Delinquents Belonging to Different Socio-Economic Groups. M. Seth (Lucknow University, 1994) conducted a study of cognitive development in socially disadvantaged Children (Orphans). S. Acharya (Berhampur University, 1995) studied the Personality, Motivational and Cognitive competencies of Invulnerable Children. R. Mehta (MSU, 1996) conducted an Experimental Study to analyze the differential impact of Theraputic Intervention Strategies on some Disruptive Behavior Disorders. V.D. Bindal (Jiwaji University, 1998) conducted a study of Relationship between Family Background and Postural Defectsin Primary School Boys. M.K. George (Pune University, 1998) conducted an enquiry into extent and causative factors of Educational Backwardness among the Marine Fishworkers of Kerala. Jasbir Kaur Virk (MDU, 1999) conducted a study of motivational atreas of Special Groups of Students at different levels of SES and Intelligence. P.M. Thomas (University of Mumbai, 2002) conducted a study of the influence of the Teacher's Presence in Don Bosco System of Education on the development of the

Personality of students as comparedto other Educational Institutions. R. Bobby (SNDT, 2002) studied the effect of Music Therapy on the Behavioural Responses of Children with Attention Deficit Hyperactivity Disorder. R. Ruhela (MJP Rohilkhand University, 2003) conducted a comparative study of Impulsivity, Locus of Control and Adjustment of Slow Learner and Normal Children. A. Varshney (University of Lucknow, 2004) studied the Cognitive Performance and Affective Disposition of School Children with Nutritional Anaemia.

**ix. Studies on Inclusive Education**

A.V. Jagtap (Pune University, 1996) conducted a study of Integration of the Disabled Children in Mainsream Schools of Maharashtra. S. Sudarshan (Bharathiar University, 1999) conducted a study of Issues and Challenges Encountered by the Resource Teachers, Regular Teachers, School Administrators, Visually Disabled Children, and Non-Disabled Children in the Teaching-Learning Situations in Integrated Education Programs.

*Special Education is a very challenging task. It demands full identification with the Children. Even Software, such as, JAWS (Job Access With Speech) are not readily available for the Visually Handicapped. Compatible Kits are not available with the Hearing Impaired and Organically Challenged. Designing Behaviour Modification Techniques for the Mentally Retarded is highly skillful task. Even more challenging is to treat them. Children with learning disabilities, learning difficulties, visual handicap, hearing impairment, physical handicap, cerebral palsy, anemia, autism, all need special care and treatment. Inclusive Education demands highly caring institutions, competent staff and congenial conditions. Teacher Education should make suitable provisions for all these Special Children.*

***Check Your Progress***

- What are the different thrust areas of research in Special Education?

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- What are the challenges of Inclusive Education ?

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**r. Educational Management & Administration**

About 3.5% of the GNP in India is spent on Education. The distribution also varies from Pre-Primary Level to Tertiary Level. Research obtains the least share which is less than 1% of the GNP. A large number of Teacher Education Institutions are still being governed by traditional, conservative, bureaucratic model rather than by Human Relations Model. Mostly in the private sector, the focus of the Teacher Education Trusts is most on Finance & Market, and least on the Growth & Development of Human beings. Even by the public sector there is abrupt cut on the Teaching Faculty. Under the aegis of being public, the State supported Universities and Colleges continue to have their inflexibility and insensitivity. There are imbalances in Teacher: Learner ratio. There are imbalances in Learner: Learning Resources ratio. Which Management Theory proposes fully qualified Teacher Educators as "Shiksha Shayak Shikshak Shikshak"? Where does the public exchequer flow if not for Education? There are problems of Management of Admissions in various Programs, Time-Space-Personnel Management, Learning Resources Management, Management of Examinations, Placement and Promotion. There are problems of Organizational Behavior and Organizational Development. There is a wide scope for developing Healthy Organizational Climate. Post-Conventional Autonomous, Creative Leaders and Administrators are rarely appearing. Total Quality Management is a myth and figment of imagination. There are problems of teacher rust out and teacher burnout.

Unless we put in concerted efforts to produce a cadre of Educational Administrators & Managers, the Nation will keep witnessing the Judicial Activism subsuming the roles of the executive, over-action of the social activists, and displeasure of the State. We need Indian Education Service (IES) cadre Persons to guide Indian Education & Teacher Education.

***Check Your Progress***

- Why do we need Indian Education Service Cadre Persons? Reflect

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**s. Taxonomy of Educational Skills**

Ultimate aim of education any where should be to develop a complete human being. For that skills need to be developed in all the domains to live happy, productive and peaceful life. Hard skills are the core skills which are required for innovation, creation, construction, and production in various disciplines, such as, Physics, Chemistry, Mathematics, Biology, Engineering & Technology, Arts, Commerce. The various phases are sensitivity, germination, incubation, innovation, creation, construction, development and implementation, whether it is designing, production and flying of an aero-plain or sensing, creating, composing and reciting a poem, or formulating, producing, analyzing and injecting a drug, or designing, development, organization and administration of an institution. Soft Skills are needed for everyday transaction. These are required for how people relate to each other: communicating, engaging in dialogue, giving feedback, cooperating as a team member, contributing in meetings and resolving conflicts, setting an example, team-building, facilitating meetings, encouraging innovations, solving problems, making decisions, planning, delegating, observing, instructing, coaching, encouraging and motivating. To be good at hard skills usually takes smarts or IQ (also known as our left brain-the logical center). To be good at soft skills usually takes Emotional Intelligence or EQ (also known as our right brain- the emotional center).Hard skills are skills where the rules stay the same regardless of which company, circumstance or people you work with. In contrast, soft skills are self management skills and people skills where the rules change depending on the company culture and people you work with. For example, programming is a hard skill. The rule for how we can be good at creating the best code to do a function is the same regardless of where we work. Communication skills are a set of soft skills. The rules for how to be effective at communication change and depend on the audience and the content we are communicating. Hard skills can be learned in school. There are usually designated level of competency and a defined path as to how to excel with each hard skill. Most soft skills are not taught well in school and have to be learned on the job by trial and error**.** Careers can be classified into three categories, careers that need hard skills and little soft skills, both hard & soft skills, mostly soft skills and little hard skills. But, Hard Skills & Soft Skills combination is rarely found. There is less research, but, more publication, less creation but more communication, less production, but, more marketing and vice versa. Masses are lost in customary designs. Hard Skills which emerge through sound theoretical base or lead to theory, with practice, patience and perseverance having

precision and perfection passionately emerge. Soft skills demand environmental sensitivity & action. Communication, transaction and transmission through the soft skills infuse life into this sphere. Here, the intent is to arrive at a combination of hard skills & soft skills. Hard and soft skills are often referred to when entering into & living a profession. While hard skills are essential to enter, it is the soft skills that facilitate professional ethics & aesthetics. To be a good personality fit for any profession we need to be quality producers, humanistic communicators, and civilized & scientific consumers. The scholars who philosophies at doctoral level in various disciplines ought to immerse themselves in their realm fully. Education Scholars by virtue of their discipline have to be wholistic. It is evident from the ideographs that some scholars are higher on Information & Media Skills, Info-Savvy Skills, Techno pedagogic skills, but lower on Yoga Skills, and Techno-Management Skills. Some scholars who are higher at Self Direction Skill and Social Responsibility Skills are lower on Techno-Living Skill. The scholar who has been found highest overall and on Adaptability & Accountability Skill, Communication Skill, Information & Media Skill, Problem Solving Skill, Self Direction Skill, Social Responsibility Skill, Human Relations Skill, Emotional Skill, Life Skill, Adjustment Skill, Human Development Climate Skill, Research & Construct Skill and Citizenship Skill, has been found relatively low on Wholistic Education Skill, Yoga Skill, Techno-Special Skill & Techno-Living Skill and inbetween on critical thinking & systems thinking and life skills. It is desirable that all the scholars have all the educational skills at the optimum level. As, a whole the skill scenario of the scholars has been found to be promising. But, there is always scope for perfection. We should be in a position to employ any skill timely, easily, precisely and joyfully. But how to realize this vision? The complexities of the living conditions demand skillful persons in various dimensions of life. All the skills have their significance. Info-Savvy & Digital Skills are as important as Spiritual Intelligence and Yoga Skills. Self Awareness Skills are as important as Systems Thinking Skills. Production Skills are as important as Consumption Skills. Zooming out is as important as Zooming in. Personal Skills are as significant as Citizenship Skills. General as well as Special Skills have their own value. Research is as important as Construction. Downloading is as important as uploading. How can life be a network of arrays of innumerous skills, where, ideas spring, feelings flow, motor creates, spirit reins, and the self resonates with the sphere in this digital age? Dancing crops, flowing wisdom, enchanting music, touching songs, resonating

dance, immersing verses, speaking sculptures, enlightened learners, innovative researchers, skillful scholars and creative constructors are the wonderful springs of nature.

***Check Your Progress***

- What are different Soft skills and Hard Skills and explain their importance.

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- What is the scenario of research on Soft skills and Hard skills?

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**t. Research Methodology in Education**

There are more of quantitative studies than qualitative. The studies are scattered and unlinked. There is lack of continuity, cumulativeness and synthesis. Most of the studies are descriptive rather than preventive and ameliorative. Culture for incubation of ideas is grossly lacking, what to talk of inculcation. Statistics and Psychometrics are superimposing reality. There is a mixed scenario of Research in Education. Some of the observations are as follows:

i. A large number of surveys have been conducted in Education. But, the principles of objectivity, transparency, equivalence and generality have not been adequately observed.

ii. In experimental research, largely the scholars move from induction to abduction to thesis to analogy to facts to theories. But inconsistent scattered researches lead us nowhere. Social laboratory is a myth and figment of imagination. It has become essential to sustain social life that the social scientists evolve their own methods.

iii. In case study research diagnosis of a case is as important as prognosis of its disposition. A large majority of us have become excellent in describing the problems and cases, but prognosis is lacking. Here the presage, process and product variables, all, need to be treated very carefully.

iv. Naturalistic enquiry which phenomenology demands needs to be conducted in an open, naturalistic, parametric setting. Because more and more are the controls in a social science laboratory, lesser and lesser is the generalization.

v. Qualitative research cannot be conducted through a-priori samples only. Sampling goes on throughout research, through various sampling techniques, such as, typical case sampling, intensity sampling, critical case sampling, sensitive case sampling, convenience sampling, primary selection and secondary selection. Qualitative Research cannot be conducted through static tools and techniques, because very often the researcher employing qualitative research methodology does not have a sound theoretical base related to the reality. Theory in fact is the product of enquiry. Qualitative Research is affected by a wonderful interaction of subject and object. The object needs to be perceived as objectively and comprehensively as feasible.

vi. One of the basic tenets of qualitative research is awareness of one's own biases. There is a need to address diversity issues, such as, gender, race, religion, ability, sexual orientation, and socio-economic status. The pursuit of knowledge should be conducted with sincerity and care.

vii. Critical theory takes as a central concern the issue of power in the knowledge context. It focuses on how and in whose interest knowledge is produced and passed on. Where are the funds floated? What is the interest? What is the return on investment?

***Check Your Progress***

- Produce a scenario of Research methodology in Education.

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- What the ways are out to develop, evolve and sustain our own research methods.

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## 4. Emerging Thrust Areas

Following are some of the emerging thrust areas in Education:

- Integration of Info-Savvy Skills in Teacher Education
- Integration of Techno-pedagogic skills in Teacher Education
- Integration of Life Skills in Teacher Education
- Establishing Norms for Teacher Education Parameters

- Effectiveness of Reflective Dialogue on Peace and Harmony through technology enabled narrations
- Inculcation of Values through Symbiosis
- Exploring the possible Role of ICT for Wholistic Development of Students
- Relative Prediction of selected variables with respect to Educational Proficiency
- Enhancement of the Emotional Maturity of the Prospective Teachers
- Enhancement of the Spiritual Intelligence of the Student Teachers
- Designing, developing & implementing a Wholistic Science Education Program For School students
- Designing, developing and implementing an Educational Program on Child Rights
- Designing, developing and implementing an Educational Program on Human Rights
- Status of Scholars on Educational Skills
- Study of the correlation amongst Research Aptitude, Teaching Aptitude, Affect Attributes & Environmental ethics of Ph.D. Scholars
- Study of the professional commitment of Teachers
- Evaluation of implementation of CCE in the Schools
- Diagnosis & Prognosis of the Problems of Higher Education.
- Resolving the current issues in teacher education
- Thematic Apperceptions of the Prospective Teacher Educators through reflective dialogue.
- Trend Analysis through Synthesizing Educational Research
- Problem Solving Through Participatory Approach
- Creative Writing Through Participatory Approach
- Identifying and developing cope up skills for 21$^{st}$ Century
- Effectiveness of Digital Lesson Designs
- Designing , Developing and Implementing Educational Open Sourcing Through e-Mode
- Designing, Developing & Implementing e-Software for Pre-Ph. D. Testing.
- A Study of the correlation amongst Research Aptitude, Teaching Aptitude, Affect Attributes and Environmental Ethics.

- Designing, Developing and Implementing an Educational Program for Time Space Personnel Management.
- Designing, Developing and Implementing a Learning Resources Management System.
- Effectiveness of ICT aided Constructivist Approach of Science Instruction
- A Study of observation of Right to education in the Indian Schools
- A Study of the Teacher Education Curricula and Modes of Transaction
- Diagnosis & Prognosis of the Problems amongst Indian Youth
- Case Study of the depression, anxiety & tension amongst Indian Youth.
- A Study of the convergence of State, society, Judiciary & Education on National Issues
- Problems of bureaucratic , traditional, conservative hierarchical Higher Education in India
- Status of Spiritual Intelligence, Emotional Intelligence and Intelligence Quotient amongst Indian Adolescents
- Study of the status of Research & Construction Skills amongst Ph.D. Scholars in India
- Exploring the possible role of Educational Radio , Educational Television, & EDUSAT in India
- Meta Analysis/Synthesis of Educational research & Emerging Research Trends
- Status of Technology Integrated Education in Indian Educational Institutions
- A study of the Surfing Skills in Educational Institutions of India
- Status of Realization of the Predicaments of universalization of elementary Education, vocationalization of Secondary Education, and rationalization of Tertiary Education in India
- A study of the growing violence through viewing of the Video & Computer Games amongst Teen Agers
- Compatibility of the Educational System in India with respect to Students with Special Needs
- Designing, Developing and Implementing a Computer Aided System for Guidance and Counseling in Educational Institutions
- A Study of the change in values of Indian Children through Viewing of the TV Serials

- Designing, developing and implementing strategies for bridging the gaps between Home Language & School Language.
- Exploring the possible role of leisure time activities in Personality Development of the Children
- Examination of the nomenclature of elementary education & higher education in India
- A Study of the Role played by Intel in Indian Education during the previous decade
- A Study of the Problems of Education of the Migrating Tribal Families in India
- Study of the Teaching Styles & Learning Styles in Indian Educational Institutions.
- Exploring the Structure & Functions of CTEs and IASEs in India
- Exploring the role of CIET and SIETs in Indian Education
- A critical study of the functioning of NCERT/NUEPA/ICSSR/UGC/NAAC/NCTE/ AICTE
- A comparative study of Teacher Education in India and other countries
- A study of the role of AIU in Strengthening Indian Higher Education
- A Study of the profiles of Vice-Chancellors in Indian Universities and its implication s for Indian Higher Education.
- A Study of the Profiles of Indian State & Central Universities with respect to their Profiles & Philosophies for Indian Higher Education
- A Critical Study of the Evaluation Systems in various Educational Institutions of India.
- Study of the Manpower Planning for Indian Education
- Study of the Problems of unemployed educated in India
- Effectiveness of the intervention programs for development of Educational skills amongst Indian Students
- Study of the In-service Programs for Professional Development of the Professionals in various fields.
- Study of the origin and evolution of ancient Indian Universities.
- Educational implications of the emerging Moll Culture in India
- Health hazards of the Fast Food & its educational implications.
- A Case Study of the Modern Educational Institutions in India

- Integration of Yoga Education & Spiritual Intelligence Skills in Indian Education
- A Study of the Cultural Heritage of India
- A Study of the Religious Heritage of India
- Study of the Regional Languages in Indian Schools & their Educational Implications
- A comparative study of the Education in Municipal Corporation Schools & International Baccalaureate Schools

## 5. Concluding Remarks

Education in India at all levels is full of problems. There are innumerous challenges. such as , Assimilating the globalization, Managing Knowledge, Continuous updating of Knowledge & Skills, Creating new age institutions, Balancing materialism and values of orient, Phantom use of Resources, Trans-planet technology stabilization, Working with multiple languages and multiple cultures, Meeting the climatic & environmental challenges, Sustaining development, Collaborative Living, Wholistic development, Developing Vocational Skills, Enhancing Communication Skills, Quality control, Removing Public Private dichotomy, Controlling Rising materialistic values, Realizing even distribution, Controlling Ecological imbalances, Fair Recognition, Valid Accreditation, Sustaining Symbiosis, Respecting Cultural Heritage, Sustaining sensitivity to the basic values, Convergence of State, Society, Education & Judiciary, Respecting Rights of all, and Transcending time, space & mind. The research focus needs to be decided very carefully. The educational research in India is quite substantive. But, the present day researcher is lost in the mechanics of research, restricting degrees of freedom and flexibility. The research agenda is almost absent. The research priorities are arbitrarily decided. But, the present day chaos in Educational Research will no longer exist. Indian Education is strong enough to sustain & strengthen its identity.