

## Details of Module and its structure

Module Detail	
<b>Subject Name</b>	Education
<b>Paper Name</b>	Perspectives and Issues and Research in Teacher Education
<b>Module Name/Title</b>	Educational Research & Sustainable Development
<b>Module Id</b>	e-PGEDN 10.31
<b>Pre-requisites</b>	Awareness of the various approaches of educational research and concepts of sustainable development
<b>Objectives</b>	<p>To Explore and introduce of the possibility of sustainable development</p> <ul style="list-style-type: none"> <li>• Educational skills</li> <li>• ICT policy imperatives</li> <li>• ICT aided constructivist learning approach</li> <li>• Educational development the visually challenge</li> <li>• Self awareness &amp; environmental awareness</li> <li>• Growth rate and various states of India &amp; HDI</li> <li>• Health education</li> </ul>
<b>Keywords</b>	Growth, development, educational skills, HDI, policy imperative, visually challenged, constructivist approach

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## **1. Introduction**

Educational Research is very often blamed to be descriptive and evaluative, rather than suggestive and contributing to policy formulation. There are wide gaps amongst developmental challenges and educational research determinism. Hardly 1% of the GDP is being invested on Research and Development in India. Problems are published everywhere. But, the solutions are rarely visible. Here is an attempt by a team of investigators to research various areas, namely, Educational Skills, ICT for Quality Research, ICT Aided Constructivist Approach in Learning Science & Development, Status of Prospective Teacher Educators on Self Awareness & Environmental Awareness, Educational Development of the Visually Challenged, Research & Action Plan for Quality Teacher Education, Growth Rate of various States in India & Human Development Index (HDI), and Health Education and Development. Research without construction and development does not have much of significance. Diagnosis without amelioration is painful. The attempts made by the budding scholars for development through Research are appreciable. The present paper definitely presents the zeal of the dedicated researchers in the realm of Research & Sustainable Development.

### **a. Research Scholars on Educational Skills**

Ultimate aim of education anywhere is 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 airplane 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 rules 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 establishment has outgrown in most of the fields in India, such as, Teacher Education, Engineering, Medicine, and even Agriculture. The main cause & effect are the improper planning & unemployable product.

The human development should ensure self- employability in respective fields. Science without experimentation skills, Art without creativity, Commerce without substance, Mathematics without speculation, Logic without reasoning, Schools without life skills, Polity without statesmanship, and nature without beauty are empty. There is a need to realize skills

in all the areas. But, the question is having Life Skills, Thinking Skills, Human Development Skills, Management Skills, Emotional Skills, Adaptability and Social Responsibility Skills, Vocational Skills, Professional Skills, and many more skills have achieved the status of Skills? The complexity of the prevailing conditions demands skills for healthy, peaceful, harmonious, meaningful living under highly complex socio-cultural-political-economic-demographic conditions. So, there is a need to integrate skills in Education. There are innumerable skills which various tasks demand. There is a need to arrive at skill level in all the areas to cope up with the challenges. Education ought to be rational as well as scientific. There is a need to realize Skill inclusive, Skill integrated, and Skill evolving School Education & Teacher Education at all levels, right from pre-primary to tertiary & continued education. The present study has explored the status of Education Scholars on various Skills. The Scholars have been found (Goel & Goel 2012) to have varied profiles on educational skills. On some skills higher, on some lower, whereas, on the other skills in between.

The scholars who philosophise 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 idiographs 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 in between 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 on 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 innumerable 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.

**b. ICT in Education: Research & Policy Imperatives**

- The ICT policy in bits and pieces leads us nowhere. There is an immediate need of ICT Policy in India. Scenario is not much different in all the South Asian Countries, namely, Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Srilanka. Haryana, Kerala, and Karnataka are doing relatively better through ICT. The other States of India and South Asian countries may emulate them.
- Every child in India should have access to compatible technology. The joy & vision in their eyes and momentum in their muscles can definitely accelerate the development of India. The energies of young critical mass of India ought to be scientifically channelized in the Technology Culture, so that, they develop a congenial media culture in this media crowd.
- To enable creative & constructive use of Technology there is an immediate need of inspiration, aspiration and perspiration.
- There should be ICT configured curriculum in all the disciplines at all levels, right from executive to the remotest field.
- There ought to be national repository of information for open sharing.
- Investment in ICT ought to be decided scientifically and amicably. There are 44.3 million school going age children off school. There are 500 million men & women off school. North East of India is relatively backward. Many a States are backwards in many a areas. Could we explore the possible role of ICT for realizing better status?

- How can ICT be used for capacity building? Many areas, such as, Education, Health & Hygiene, Administration, Science Laboratories, Entrepreneurship, Technology & Engineering, Medicine, Agriculture & Horticulture are starving and striving for the suitable integration of ICT.
- The digital wave in Bhutan is appreciable. What use is ICT if it does not contribute to the Human Development Index? Let us enable the society through ICT and empower the nation.
- Nepal is trying to bridge the gap between two generations, that is, teachers & learners in the realm of ICT. India has the similar scenario. There is a need to develop Professional Development programs without any further loss of time. Why teachers and learners should be alienated in this age of social networks.
- The role of ICT should be explored in all the areas. We need to realize ICT integration in all the areas.
- ICT ought to be fully deployed for aggressive action research countrywide.
- Every Minister of Education in India ought to initiate Policy formulation in respective areas realizing reflective dialogue at national level, for example, ICT Policy for Teacher Education, Health Education and Education of the Disadvantaged groups.
- e- Courses & Programs should be launched and appreciated, such as, e-B.Ed. proposed by the MKCL, Pune, B. C. Ed. & M.C. Ed. Programs offered by the DAVV, Indore.
- It is high time that the ICSSR, NCERT, NCTE switch over to e-Surveys & publications. The research agenda by all the apex agencies should be made evident and public. All these agencies are advised to switch over from paper to e-mode.
- There should be e-consortiums in various areas, such as, environmental education, health education, life skills, educational skills, Human Development Index.
- The efforts of the CASE in establishing Indian Consortium of Research in Education (ICORE) are appreciable. The ICT facilitated social networks ought to be fully functional.
- The relative role of various ICT Media ought to be analytically & comprehensively defined in various areas. How Radio, TV, Computer, Internet, Satellites can contribute to the development?

- The credibility of the ICT based research ought to be established. The characteristics of the ICT based tools, techniques and approaches ought to be established.
- The research outcome ought to be widely deployed through e-News Letters, e-books, e-compendiums. All these publications should observe socially acceptable standards.
- India has the potency to create, construct & nurture the greatest form of ICT. All our quality products ought to be timely patented.
- Our ICT policy ought to be formulated on the principle of equity & equality.
- A large number of the teachers feel alienated and alone in this digital age of networking & globalization. It is because we do not have Technology Integrated Education. We, the 21<sup>st</sup> Century Teachers are lost in the realm of technology. We are neither techno-savvy nor info-savvy.
- We travel through the media crowd without being sensitive to it. We need to modernize temporally, spatially, logically, epistemologically, and technologically. Technology can facilitate our transition from dot to globe and point to morphology.
- Technology is well woven in almost all walks of life. But Education is relatively technologically backward. Every teacher should put in efforts to be techno-savvy, because it is Education and Education only which can deploy and integrate technology faithfully with a service motive. Indian Teachers are highly adaptive & highly innovative. Very willingly, and passionately they are living the technological era of information explosion & media implosion.
- How can life be a network of arrays of innumerable skills, where, ideas spring, feelings flow, motor creates, spirit reins, and the self resonates with the sphere in this digital age? We teachers need to learn what to tweet, whom to tweet, how to tweet, when to tweet. How do I value Facebook? How should I construct my Facebook? Which messages should I send via messenger? What should I SKYPE? What should I email? What should I Blog? Less Well's Model- Who, Says What, To Whom, Through Which Channel, and With What Effect needs to be employed in each communication.
- The communication has become very fast through email & Gmail. We need to exercise instantaneous communication control, because, we cannot not communicate & communication is circular & irreversible. Internet- the World Wide Web is a universal network. Innovators & Creators, Crackers & Hackers all reside here. The

21<sup>st</sup> Century Teacher has to be really perfectly fully complete to facilitate development.

### **c. ICT Aided Constructivist Learning Approach & Development**

Reflections of the Pre-Service Teachers on ICT Aided Constructivist Learning Approach in Science ( Ganiger & Goel, 2013) reveal that

- ICTACLA in Science is really innovative one, through which the teaching-learning in science has become meaningful.
- This is activity oriented and based on the principle of learning by doing. This approach is powerful both for lesson designing & transaction.
- Use of ICT in the constructivist science classes really provides scaffoldings with the earlier knowledge to make new connections.
- ICTACLA develops the creative & constructive faculties of the learners, sustaining their interest & curiosity.
- Doing experiments by the learners is a thrill of joy. Through this the complex, abstract concepts could be made more clear, simple and concrete.
- ICTACLA has been found to be very effective approach of Science Teaching & Learning.
- In some of the schools, though smart, yet the facilities of ICT were not found. It would be better that the School Education and Teacher Education institutes have the well equipped laboratories.
- Online sharing of science experiments and responding to the queries makes Science Learning very lively.
- ICTACAL teachers are self motivated & better prepared.
- ICTACLA creates such a learning environment wherein the learners can think independently and work according to their capabilities and work on own examples, so that their real learning occurs.
- Collecting, organizing, transacting the information collected through the Internet and integrating within the constructivist framework is really a challenging task.
- Only studying theory does not work unless it finds place for practicing it. So the theories taught in the classroom should find their expression.



- Here is no hurry for completion of the syllabus; ICTACAL covers much more than the syllabus demands.
- Preparation of teaching aids is joyful, one can think divergently.
- There is full immersion of Teachers & Learners in Science through this Approach.
- As it is problem-solving approach, we usually go by simpler to complex, concrete to abstract, induction to deduction, germination to incubation to innovation to creation and construction, which continuously sustains curiosity and passion amongst the children.
- Identifying student's interest and designing the teaching-learning activities accordingly makes all kinds of learners to learn and construct new knowledge.
- ICTACAL facilitates experimentation in natural setting realizing a natural laboratory.

The orientation program based the ICT aided Constructivist Learning Approach in science and its implementation on the re-Service teachers has had substantive returns. It is evident that use of ICTACLA has made the pre-service teachers confident in using this innovative approach in teaching science. The development of the Lesson plans using 5E's and 7 E's made the pre-service Teachers engage themselves completely. Integration of ICT applications into the lessons, engaging in virtual world of science, hyper linking the information with artifacts, discussing through social networking systems, evaluating throughout the classroom, emphasizing on self- evaluation has demonstrated how the pre-service Teachers could be transformed into Teaching Scientists.

#### **d. Educational Development of the Visually Challenged**

The latest predicament of our nation is the quality inclusive education for all. The realization of quality inclusive education for the visually challenged, hearing impaired, deaf & dumb children demands careful, intensive sustained struggle. To include even a single student with a single challenge in a normal class demands a lot on the part of the education system. The present research (Darji & Goel, 2013) attempts to study the profile of a visually challenged prospective Teacher Educator through an interview with a Teacher Educator. The interview presents the plight of the student, struggle of his parents and concern of the education and society at large for the education of the visually challenged student. It presents how his parents are awake with him beyond mid nights, read for him from the learning resources,

record for him for progressive playback. Also it presents how the packages, such as, JAWS, that is, Job Access with Speech is supportive in this digital age. Radio is a blind man's medium and is meant for ears only. It plays with sound and silence where the sound can be anything like voice or word, music and effect. Sorry to record, that Educational radio in India is either not utilized or is underutilized.

It presents the need for casting the curricula and modes of transaction for the visually challenged in the audio and digital modes through various emerging technologies. The visually challenged learners require audio support in all phases, such as, learning resources, modes of transaction and evaluation. Whether the writers in the examination for them could be substituted by some equally credible media to record. Though we propagate inclusive education for the visually challenged, yet we present the question papers to them in print form. There is a need to design a compatible education system for the visually challenged.

## **2. Emerging Views**

- As such there is no difference in the curricula for disables and non-disables. It is not and it ought not to be. The problem lies with respect to the modes of transaction of the curricula. For example, while teaching in a class having visually challenged, while writing on the black board the teacher should speak also.
- The visually challenged students ought to be provided with the subject matter in compatible forms, such as, e-form, brail form.
- As far as English and other European languages are concerned, packages, viz., JAWS and Open-book are suitable, but, when it comes to Indian Languages, more suitable packages ought to be explored. Every visually impaired person can have access to Indian languages through listening and typing on computer, if the suitable packages are accessible.
- The teacher and Education system ought to identify the problem of the visually challenged just in front of them. The teacher should not only visualize the content configuration, but also, they should try their level best to reconstruct the reality through spoken words to make the visually impaired persons visualize the essence of the substance.

- Inclusive classes demand serving all the senses simultaneously equitably. Such humane and resourceful professional teachers ought to be groomed and cultured.
- Defect by default is rarely repairable. Still, aggressive educational and social attempts should be made to share the state of the disadvantaged by all. The needs of the disadvantaged should be supplied to the fullest possible extent by all the agencies, of which parents, siblings, peers and teachers are the nearer.
- All the functionaries of the educational institutions should identify with the disadvantaged people. Differentiated differential inputs and processes ought to be devised to meet various challenges.
- The Learning Resources Management System should be user friendly, irrespective of the abilities and disabilities.
- The intelligent canes/sticks/walkers should be provided to the visually impaired and orthopedically challenged.
- Open source wares and e-resources repertoires should be made readily available to the visually challenged.
- ICT can contribute a great deal in bridging the gaps amongst different senses, teaching styles and learning styles, learning resources and learner profile.

#### **a. Profile of Prospective Teacher Educators on Self Awareness & Environmental Awareness**

The self-health hazards and Environmental hazards both are on the increase. It is Education & Health, both, the twins are grossly neglected. Education is the least priority of the State. Predicaments are empty slogans. Assurance does not ensure. Medical malpractices are on the public fore. It is high time that India awakes. It is high time that the education, educators, and educated awake. It is high time that the Education, Society, State & Judiciary emerge & converge. All ministers are expected to formulate a national policy in respective domain, say, Health Education, Teacher Education, ICT in Education. We have relatively more of expectation with Education than any other agency. Education has to realize its identity. The present research (Goel & Goel, 2013) attempts to study the profile of prospective teacher educators on self-awareness and environmental awareness, with a pious intent to enhance if wanting.

- The correlation between Self Awareness and Environmental Awareness on the scores obtained by the Prospective Teacher Educators has been found to be equal to 0.1434. It means co-efficient of determination is very low.
- The Prospective Teacher Educators need to be groomed on various facets of Self Awareness as well as Environmental Awareness, such as, follows:
  - Very often remembering sad moments rather than happy moments of life demands reversal. Whatever has gone by has gone by. We need to learn to live in present. It is not worth to brood over the past.
  - Over trusting and not at all trusting others are the two extremes. Trust is a construct of many factors which need to be internalized and exercised, such as, level of concern, empathy, fellow feeling, welfare, unselfishness, openness, clean dealing, level of identification, trust worthiness.
  - Trust ought to be scientific and systematic rather than blind based. False trust is a crime. Let those Trustees seize to be Trustees who are not trustable & trustworthy.
  - There is no reason to imprison the sorrows within. This biosphere becomes meaningful when both the happiness and sorrows are shared.
  - A large majority of Prospective Teacher Educators have been adversely affected by anxiety, tensions, emotions and defiance. Rather than seeking external guidance they ought to establish self-talk to come out of these phobias and clouds.
  - Two of the Prospective Teacher Educators have developed the habit of procrastinating, i.e., delaying things. It can be controlled progressively through learning management.
  - Some of the Prospective Teacher Educators have been found to be highly extroverts where as some alienated & introverts. Such personalities have due scope for intervention.
  - A critical mass of Prospective Teacher Educators has reported to be backward in Mathematics, Computer Programming and Spoken English. All these discrepancies can be over powered with passion and perseverance.
  - Some of the Prospective Teacher Educators have been found to be victims of low self-esteem, and low estimation. They can develop their morale by employing indigenous mechanisms.

- A sizeable number of Prospective Teacher Educators are suffering from depression, aggression, nervousness, uncertainty of future and over sensitivity. There is a need to explore aggressively to find out what has made them regress to such a realm.
- The Prospective Teacher Educators have been found to be reasonably aware of their strengths and weaknesses.
- There is a need to emulate the strengths of all the Prospective Teacher Educators.
- The scholars have exhibited many a creative attribute, such as, creative composition in the form of poems, narrations, dance, music, drawing, painting and cooking.
- Their class cohesion, roaring synergy, cultural heritage, educational identity, continuous curiosity and spontaneous respect are perceptible every moment, promising their Teacher Education Proficiency.
- However, the class profile of Prospective Teacher Educators has been found to be relatively wanting on natural Environment. A large majority of them have not been in a position to respond correctly on areas, namely, whether landfills are designed to help biodegradable waste decompose quickly, whether green washing is an alternative to white washing, whether Expanded Poly-styrene & Poly-propylene are recyclable, whether more than 50 million of Bangladeshis are exposed to excessive Arsenic in their drinking water, which are the green House gases, whether it takes more than 1 million years for a plastic plate to decompose, whether acid rains cause most problems in Australia & California, which is the most beautiful, cleanest, greenest planned city in India & which one is the most polluted, how the once common sparrows are now harder to see, how the honey bees are disappearing globe over, how the fast food contributes to health, which are the endangered species, which substances are more ecofriendly, What is global warming due to. It seems in spite of Environmental education as a Special area in Teacher Education, it has neither been in a position to develop environmental awareness, nor environmental ethics. Even in the 21<sup>st</sup> century the Post Graduate Students with Science background do not know the structures of many a polymer, such as, Expanded Poly-styrene, Poly-propylene, Poly-ethylene, Poly-vinyl Chloride.
- Some of the Prospective Teacher Educators are wanting in the domains of Politics, Economics, Spiritualism, and Metaphysics.

It has been a valuable experience researching the self-awareness & environmental awareness of our M.Ed. Scholars, the Prospective Teacher Educators. It was overwhelming to find the youth aware of the self-strengths and weaknesses, and moreover, sharing those whole heartedly. They have been found to be socio-centric. But, largely they have been found not to be groomed into the natural, political, economic, spiritual and metaphysical environment. Their level of self-awareness has not been found to be the determinant of the environment and vice-versa. Their ought to be ample inputs on environmental awareness & ethics right from nursery to higher education.

### **b. Research & Action Plan for Quality Teacher Education**

According to Goel & Goel (2012), the Educational Research in India is quite substantive. But, the present day researcher is lost in the mechanics of research, restricting degrees of freedom & 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. Here is an action plan for Quality Teacher Education.

- It is high time for India to revive the NCTE, with full respect, to regulate the Teacher Education not to let the Teacher Education regress to void and vacuum. The Teacher Education at large has become stagnant, stale and sterile.
- A Central University of Technology Integrated Teacher Education (TITE) ought to be established with satellite campuses in all the regions.
- All the emerging paradigms of Teacher Education ought to observe their ethos, such as, Open & Distance Teacher Education, Integrated Teacher Education, e-Teacher Education, and of course, the F2F Teacher Education.
- Content-Pedagogy-Technology integrated modes of Teacher Education, viz. B.A.Ed., B.Com.Ed., B.Sc.Ed., M.A.Ed., M.Sc.Ed., M.Com.Ed. need to be strengthened.
- Innovative Programs offered by some of the Universities, namely, DAVV, Indore, Banasthali Vidyapeeth, and Lucknow University ought to be revived and further deployed.

- Indian Consortium of Research in Education (ICORE) ought to be established to share educational research in South Asia. The sensitivity and sensibility of the apex bodies, such as, UGC be sought to such proposals.
- It is painful to learn that the Department of Educational Research & Policy Perspectives at the NCERT has been divided into Division of Educational Research. Only God knows where the other slashed integral & integrated component of Policy Perspectives is lost. Our Educational Research ought to be with the Policy Perspectives.
- It is high time that the ICSSR focuses on the Taxonomy of Educational Skills in the context of Indian Education.
- Taxonomy of Educational Research ought to be arrived at. There ought to be due focus on positivism & logical positivism, Interpretative & hermeneutic, as well as, critical reality paradigms.
- The course work made mandatory by the UGC for Ph.D in various disciplines, including Education has resulted into mechanization of Research in India. Attempts should be made to de-mechanize research leading to innovative, creative and constructive research.
- Could there be dedicated composite PG programs in Education, say, M.Ed. after +2 or dedicated Ph.D. in Education (B.Ed. M.Ed. & Ph.D.)? If yes, then what should be our action plan?
- The apex agencies & institutions, such as, CASE, CIIL, HBCSE, ICSSR, NCERT, NCTE, NUEPA, UGC should decide the Research Agenda for the Nation.
- The NCERT should sustain its Research Heritage of Educational Surveys. The Nation is expecting the next Educational Survey. It is high time that the NCERT brings out the Educational Survey in e-form, also.

### **c. Growth Rate of various States in India & HDI**

Haryana is leading State in the country among the big States in per capita income. The per capita income of Haryana was 1,09, 227 in 2011-12, whereas, the per capita income is estimated of Rs. 1,28, 341 during 2012-13. The economic growth of the State is 9.9%, which is the highest of India. Haryana is the first State to provide safe drinking water facilities all over the State. The per capita expenditure in the State on the health services

during the year 2011 was Rs. 490.28. (Hindustan Times, Delhi, Sunday, Feb. 3, 2013). Haryana was carved out of Punjab on Nov. 1, 1966. Having emerged as a path-breaker and trend setter, Haryana has traversed a great distance. But, has the State really made a tremendous growth in totality? What are the Education Index and Life Expectancy Index of Haryana State? What is the level of internal security & external security in Haryana? What is the level of equity & equality in Haryana? What is the Human Development Index in Haryana? What is the overall State Development Index? What is the relative status of agriculture and industry in Haryana? How the GDP and HDI of the State could be enhanced? In which domains Haryana could be emulated by the other States of India and vice-versa? Kerala State has always been excelling literacy rate. But, has the State realized sustainable development. Karnataka & Andhra Pradesh are the leading States on Information Technology implementation. But what is the Human Development Index in these States? What is the present status of Punjab on HDI which is a prosperous State? What is the status of North East of India on HDI? It is high time for India to produce State-wise Human Development Index.

#### **d. Health Education & Development**

- Our food habits have changed. There is evident transition from home made food to fast food. It has come to the fore that these preserved foods are largely not hygienic. These usually contain excessive fats and spices and are acidic. Though the food is high calorie, but, it does not provide adequate energy, Also, the preservatives used, such as, nitrogen, chlorine, carbonic acid, vinegar and impure sugar (molasses) are harmful. Also, the refined wheat flour (Maida) consumes significantly more time for digestion. The fats overused for frying cause many a health problems. Consumers have changed their tastes as per the tastes of the producers, fair or foul. There is ocean of food stuff, but, non-compatible. What to choose? Where from?
- The entire environ is polluted, There are water pollution, air pollution, soil pollution and noise pollution. Which water to drink, which air to breathe, which vegetables & fruits to eat, and how to find noise free corner? There is environmental awareness but very rare environmental ethics. There is degeneration of environment. With the lust for luxury many a species are disappearing. Fully healthy people are no longer seen. Every one suffers from one or the other disease. What is the resolve?
- The life styles have changed. We have moved from naturalism to existentialism. We have moved from simple living & high thinking to high living & simple thinking,



from health is wealth to wealth is health. We are going far away from our heritage and culture. Truthfulness, compassion and forbearance seem to be mere slogans. We are in more of competitive societies than cooperative. The nuclear families have resulted into the alienation of children.

- We are using technology or technology is using us? We have media crowd, but, no media culture. There are many health hazards due to over use of Technology. It is high time that we become techno-savvy, info-savvy, net-savvy and media-savvy.
- Our greatest disease is passions, possessions, obsessions. There are many a medical malpractices. There is a need to realize professional ethics.
- Molls are rising in India at a rapid pace, but, we do not have moll culture. Almost every hand has cell phone, A to Z phones, but, we do not have cell culture. Only God knows what we keep communicating round the clock. We have media crowd, but, no media culture. Health hazards are self evident. Modernization & perfective maintenance ought to be there. Modernization & perfective maintenance demand precise regulatory mechanisms and controls.
- Each one of us should observe Yoga for sound health.
- We need to employ, both, preventive, and ameliorative measures for sustaining sound health.
- Health Education ought to be integrated with Educational Curricula at all levels, from pre-primary, through tertiary & continuing.
- We should observe healthy Heart & Brain entrainment Ratio.
- We should sustain our smiles and laughter under even the most adverse conditions.
- Human Development Index should be of prime importance for any nation.
- Various States in India ought to learn from the development of each other.
- India should formulate National Health Policy at the earliest.

Degenerating health of all of us in India is an alarming issue. There are many health issues in India. Neither we are fully aware of the self nor that of environment. The present article focuses on how there is a need of observing healthy heart and brain entrainment ratio. How yoga can contribute to the heart & brain entrainment ratio and sound health. The present day modern society is busy without business. We rarely find natural, continuous, spontaneous, roaring laughter, and natural graceful soothing smiles. Let us revive our health, resonating

laughter's, and flowing smiles, because, it is our duty to preserve and sustain the health heritage of India. The State ought to define its role and arrive at a Health Policy for India. We need not produce a health issue repertoire, because all these issues are self evident. Despite the policies & programs on Environment & Health, the Plants, Trees and greenery is disappearing. Children keep munching the junk food, non-stop. Adults keep drinking the tea & coffee, count-less.

The very presence of such contracts is ridiculing the poor innocent rural, tribal and even urban. No research rigor is required to know the health status of India. The street roads full of Pan & Tobacco spits, full of all sorts of roughage, pits & ditches reveal a lot of the Psycho-Somatic State of we Indians. Junk food, green washed vegetables & fruits, medical malpractices, all sorts of pollution and indifferent people, narrate a lot of the health of India. Could the Education, Society & State converge and reflect on the health issues? No government policies will work, unless each & every Indian is health educated & accountable. Human Development Index ought to be the priority of Indian Government. Health issues in India are highly alarming. Despite all the preventive maintenance why do we fall sick? It is because the environment is polluted. Who is accountable? We all. Every foreign latest virus first enters in India. It is because we do not have adequate security measures. There are many a indigenous diseases born in India, Some of these have been named, the others are yet to be named. We salute all of us for our survival, because, we employ all the possible Medical Sciences, such as, Naturopathy, Homeopathy, Allopathy, Ayurveda. We need to bring about health sensitivity & consciousness. We recall age old slogan "Prevention is better than Cure." But, how to sustain health in a suffocating environment? Health Education seems to be the best resolve. Health Education should be introduced in Educational Curricula at all levels. Let us observe environmental ethics. Medical Sciences ought to do analysis at the functional level. Medical Sciences & Medical Ethics ought to be perfected. More than the ameliorative, we require preventive measures for the full health of the masses. We should employ Raja Yoga, karma Yoga, Bhakti Yoga & Jnana Yoga as Voiced by Swami Vivekananda, and ancient Cultivation Practice of Truthfulness, Compassion and Tolerance of Falun Dafa.

### **3. Concluding Remarks**

A thorough analysis of the Educational Research repertoire reveals that we have more of descriptive & evaluative research rather than suggestive, the policy research. National

Problems and Research Problems are not in tune with each other. Research theses rest in the racks & carols. Research has contributed very little into the development. Technological, as well as, Philosophical & Historical research theses have rare expression at the operational level what to talk of Psycho-Social & Political. Our academic courses have the Philosophers & History, but, their philosophies & heritage rarely flow through our nerves, vessels, motors & streets. The effectiveness of technology has been well demonstrated at the laboratory level. We, the Social Scientists have largely failed to move out of our laboratories to the operational levels. Our problems are pretty evident. A cursory look pours innumerable problems. Where is the need to establish cause & effect relationship. It is high time that in many a areas we start the development with the effects, not bothering much about the causes. India is a self contained wonderful land. India knows how to nurture & develop. The curiosity & concern of the innocent creative, constructive and developing masses is recursively remarkable. It is all evident through our rich cultural heritage, decent present & promising future. India is broad enough to absorb all noises & strong enough to revolt all threats. India has both agrarian & digital faculties, extending from dot to globe, point to morphology and earth to the sky. We are amply exploring & developing. We have seers & engineers, whose text is its own testimony and design its own perfection. We do not require patents or labels. That is the wonderful ethos of sustainable development of India.