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NCERT

JOURNAL OF INDIAN EDUCATION

Volume XXXIII **Number 2** **August 2007**

CONTENTS

The Aims of Education*

Abstract

As an apex national agency of educational reform, NCERT is expected to review the school curriculum as a regular activity, ensuring the highest standards of rigour and deliberative openness in the process. Consequently, in 2004, the NCERT initiated the review of National Curriculum Framework for School Education–2000. In the context of this exercise, a National Steering Committee chaired by Prof. Yash Pal and 21 National Focus groups were set up. These focus groups were created to generate ideas and to reflect upon curricular areas, national concerns and systemic reforms. Each Focus Group through discussions and intensive deliberations produced a research-based Position Paper providing a comprehensive view of existing knowledge in the area and future direction. The position papers prepared by the NFGs provided inputs to the National Curriculum Framework–2005. All these position papers are available in print form and also on NCERT's website. For the readers of the Journal of Indian Education we present here the text of one such position paper Aims of Education.

Introduction

For a fairly long time now, we have been engaged in the great task of educating the children of India, an independent nation with a rich variegated history, extraordinarily complex cultural diversity, and commitment to democratic values and general well-being. Given the enormity and importance of this task, it is necessary that we create occasions from time to time to sit back collectively and ask ourselves, 'what are we doing in our engagement with this task? Is there a need to ask ourselves afresh some of the basic questions such as what ought to be the purpose of education?' The constitution of the focus group on the aims of education is perhaps meant to provide such an occasion.

If we look at what the school education system has done in the last decades, perhaps we have much to be satisfied with. Products of this system

*Position Paper, National Focus Group on Aims of Education, *National Curriculum Framework–2005*, NCERT, New Dellhi.

useful, but, very importantly, have this other expressive aspect. A community traditionally assumes a degree of continuity for itself–continuity of its constituent structures of human relationships, which give it, to a large extent, its identity and meaning. Given this assumption, the aims of education within what might, somewhat misleadingly, be called a communitarian framework, have primarily to do with the community's idea of well-being and flourishing. The highest value that education within such a framework was expected to promote and foster was, perhaps, 'allegiance to the community'.

However, even though community continues to be a powerful presence in our own times, and despite proliferation of deliberately constructed communities, the world has for a long time been moving away from a community-centric view of human existence in two widely divergent directions: the direction of the individual and the direction of the universal or the global. The well-being of the individual is seen to be more important than the well-being of the community. This perhaps is the genesis of the idea of human rights as of many other central concepts of the modern world.

Humanity is sometimes conceived as the 'community' of all individual human beings. But this is a serious misconstrual of the idea of a community. Our attachment to the notion of community is profound and persistent. In equating humanity to a community, we not only give expression to this attachment but also invest it with a meaning it does not have.

Given the radical change of perspective that has taken place, education must now be seen as fostering values which constitute the well-being of the individual on the one hand and the well-being of humanity on the other.

But the difficulty here of course, is to clear about the notion of the independent of the complex matrix of relationships in which an individual is inevitably located? And what is this all – inclusive humanity, as distinct from this or that specific variety of humanity?

The lack of clarity about the idea of an individual and humanity as such is bound to create difficulties for us in thinking about the aims of education in our times. Thus, for instance, we have to find a way out of a seeming contradiction such as: We must encourage children to cultivate the 'scientific temper' (that is, the tendency to follow their reason beyond the dictates of culture, tradition, and community) and also teach them the unassailable values of humanity. Also, we must find a stable room for the nation between the individual and the humanity.

Aims of Education

Here are however, issues relating to education about which have a fairly clear idea and about which there ought to be general agreement to a large extent. It would be helpful to seek an answer to the question 'what ought to be the aims of education?' by way of our engagement with these issues:

(i) School education is a deliberate and more-or-less external intervention in the life of a child. Although much learning and teaching takes place at home, in the neighbourhood community, and in

to do with moral life at all. For example, courage by itself can be put to incredibly evil use; think of the courage Nathuram Godse. The same thing can be said of intelligence. As to temperance if it is tempered with the vital unity of moral life, it is in perpetual danger of degenerating into soulless, ritualistic disciplining of oneself.

What is it that breathes morality into the virtues? It is – we must have the courage to acknowledge – truth and love, or, in terms of our own powerful tradition of moral thought, *ahimsa*. Truth means freedom from self-deception; here it is never enough to speak the truth occasionally. As Wittgenstein puts it, "The truth can be spoken by someone who is already *at home* in it; not by someone who still lives in falsehood and reaches out from falsehood towards truth on just one occasion."[2] Courage, temperance, intelligence, and so on cannot come together in the vital unity of virtuous life unless they are profoundly mediated by the love of truth. And the love of truth-when we are talking of a moral life-can flourish in the supreme and active presence of *ahimsa*.

Secondly, in the context of moral life, the means and the end must form a continuum such that, as it were, the means and the ends make a wholesome unity? The distinction between the means and the end in this context, if there is one at all, is not the same as the distinction where the means is merely instrumental in producing the end, for example, playing football as a means of keeping physically fit. Morality is external to a virtuous life in the way football is external to physical fitness. (The position taken here is distinct from the utilitarian position epitomised in the dictum 'honesty is the best policy'.) In the moral sphere, the process is integral to the product and the product is inalienable from the process. Here, there can be no such thing as finding the most efficient means of achieving a predetermined goal (as in, say, matters of management), for the means in the pursuit of a moral end is not replaceable.

An important corollary of this is that if value education must be a part of the education system, values or virtues must be integral to the whole process of education. Value education cannot be imparted as a separate bit of education; the whole of education has to be value education. Here, we need the powerful reminders, in variety of ways, of the Gandhian ideas of *ahimsa*, peace, and harmony.

(iv) Cultural diversity is one of our greatest gifts. To respect and do justice to others is also to respect and do justice to their respective cultures or communities. We, therefore, need to radically change the centre versus periphery perspective on intercultural relationships in our country. Cultures on the so-called periphery must receive as much attention as cultures in the centre. As for education, its implications is that ways of life other than one's own must be imaginatively and effectively presented as deserving of as much respect as one's own.

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[2] Wittgenstein, Ludwig 1973. *Culture and Value*, Blackwell.

Some Implications for Pedagogy and Evaluation

It may be useful to consider some of the implications of what has been said so far for pedagogy and evaluation. The strangeness of the school environment can be mitigated by imaginatively linking the experience of school with the child's experience outside it in the community. While school might have many new and exciting experiences for the child, it must not appear as rejecting or eve ignoring the child's experience in the community. Pedagogy will gain but incorporating children's experience of what the Greeks used to call *oikos,* and likewise and it can teach them fresh ways of experiencing the world outside the school. For example, if a child has grown up in intimate contact with the nature around him, as most children in tribal communities do, school can enrich and enhance this intimacy by sharpening the child's awareness of his own natural environment–something that sadly does not happen in most of our schools. The role of the teacher here is absolutely crucial. One is reminded of the nineteen-year-old teacher who came to help Tagore with the teaching in his school:

With him boys never felt that they were confined in the limit of a teaching class; they seemed to have their access to everywhere. They would go with him to the forest when in the spring the *sal* trees were in full blossom and he would recite to them his favorite poems, frenzied with excitement…He never had the feeling of distrust for the boys' capacity of understanding …. He knew that it was not at all necessary for the boys to understand literally and accurately, but that their minds should be roused, and in this he was always successful he was not like other teachers, a mere vehicle of textbooks. He made his teaching personal, he himself was the source of it, and therefore it was made of life stuff, easily assimilable by the living human nature."[3]

Pedagogy must draw upon resources of creativity and exploration, such as literature in its various forms and history in its uncovering modes, e.g., unmasking the mind of the colonisers as well as that of the colonised. It is important to establish connections between apparently discrete events and things, between things and events close to one and those distant in time and space–connections which can bring sudden light to the workings of the child's own mind.

If the world of education is, in a sense, moral education, and if means and ends in moral matters are organically or internally connected, the teacher, who is the primary vehicle of education, must be seen substantially as an embodiment of virtues in his role as a teacher.

Teaching should be in the conversational mode rather than in the mode of authoritarian monologue. It is in the conversational mode that the child is likely to grow in self-confidence and self-awareness and will more easily establish connections between the

[3] Tagore, Rabindranath 1996. My School. In Sisir Kumar Das (ed.) *English Writings of Tagore*, Vol. II. Sahitya Academy.

have learnt through participation in the practices of our communities. In different communities, the practices and traditions vary widely.

The term tradition may be interpreted in many ways. In its barest sense, it means that which is handed down or transmitted from generation to generation in a community because it consists of devices and principles that have helped the community to make sense of its experiences and activities. Perhaps, it was for this reason that Wittgenstein had rightly remarked, "tradition is not……a thread he (man) can pick up when he feels like it any more than a man can choose his own ancestors."[4]

Education as a planned endeavour, at a personal level on a small scale or institutional level on a large scale, aims at making children capable of becoming active, responsible, productive, and caring members of society. They are made familiar with the various practices of the community by imparting the relevant of skills and ideas. Ideally, education is supposed to encourage the students to analyse and evaluate their experiences, to doubt, to question, to investigate – in other words, to be inquisitive and to think independently.

As we grow, we face new and unfamiliar experiences which question our old ways of thinking as these experiences are either inconsistent with or at a considerable variance from what we had gradually learnt to take for granted. Such experiences are critical and challenging as they involve or require formulation of new concepts, revision of preconceived notions, and new ways of looking at and dealing with the world. It is this unique human ability that is called rationality, which is manifested in human behaviour in a wide variety of ways.

Our attempts to make sense of our experiences, to comprehend the world that we live in, require that we recognise patterns, structures, and order in the world. Without such recognition, we would not be able to make any judgements; we could not be in a position to be certain about anything. This quest for certainty, taken to its extreme, may become a demand for a monistic and absolute criterion by which it would be possible to draw sharp lines between the rational and the irrational, knowledge and a lack of it. In becoming captives of such a restricting vision, we forget that there are numerous ways in which we learnt to know and to reason about the world. This forgetting leads us to reduce rationality to mere formulas of deductive reasoning, placing greater value on theory over practice, natural sciences over art, and information over knowledge.

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[4] Wittgenstein, Ludwig 1973. *Culture and Value*, Blackwell. P.76.

The Arts as Education

Why Arts Education should be Included in the Curricular Area

ANJANA PURI*

Abstract

Although the arts are as old as mankind and are as complex as the ways of human beings, they have not yet been given the same status as the sciences and the humanities have been given, within the frame of school education. One has yet to understand the inherent link that connects the arts to other subjects, giving them their inter-disciplinary character. Each of the arts – irrespective of whether they are performing, non-performing, visual – has inherent values that make it a source for education, holistic in nature. It thus becomes significant to examine performance holistically, because within the concept of holistic performance are a large number of areas that might be diverse in nature, but are closely linked to each other within as well as outside the bounds of the art form. It is, therefore, required to look for the relationship between the performing arts and the other subjects. One could investigate to what extent the arts have been integrated in the text of specific subject areas or one could look for different subject areas in the performing and visual arts. This would need analysing the arts in a manner that would highlight various fields associated integrally with the arts. The arts have to be considered as something beyond immediate performance, comprehending the difference in concepts such as 'arts in *education', 'arts* and *education' and 'art* as *education'.*

Introduction

Repeating what has been said time and again in the context of the status of the arts within the framework of school education may seem pointless. But it does not stop one from wondering *why* the arts are still not considered on a par with the sciences and with other subjects comprising the humanities. The arts are as old as mankind and therefore have history; they are region specific and therefore are connected with geography; they are expressions of the complex web of socio-developmental structures on

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which human society functions and are therefore integrally linked with sociological study; they are expressed through sound, word and script, and are therefore linguistic manifestations; they are mental images, which are given physical expression through a psychological process; converting what is concealed within into visible outer images through psychological and physiological acts involves scientific analysis; drawings are geometrical impressions; colours are the play of light and shade; and the aesthetics of colour, sound and form give the arts an enhanced status that actually makes them unparalleled. If this is not enough to give the arts the stature they deserve in the academics, what is?

True, the arts are as complex as the ways of the human being – all expressions is complex. The development from rock art drawings where "the legacy of mankind [that] captures experience of the life phenomena of man"[1] to the lines of abstraction and representation stimulating the imagination to think in terms of serpentine lines, circles, curves, squares, form and non-form, illustrates the most modern of 20th century art expression. Think of surrealism,[2] which has traced a significant route from inner reality to outer physical manifestation. It is true, though, that while this is evident of the visual arts, it is more difficult to define, say, music and the musicality of the voice. Music and musicality are at once oral and aural, formless unless transcribed palpably even though they are as physical as breathing. They are a 'canvas' that displays sound-shapes beginning with the sound of the child's first cry and going on to the most complex musical patterns rendered in performances. In a backdrop as colourful as this, it would be of the essence to understand the intra- and an inter-disciplinary character of the arts.

The Arts and their Different Streams

Performing and visual arts are expressions of inner reactions to the surrounding environment. Regardless of whether it is a child's scribbling or its vocal sounds devoid of meaningful words, they are effective articulations of what is veiled within. These at a later stage develop into disciplined arts of expression, the mediums of which might be varied. What a child passively imbibes from its surroundings includes a diversity of areas that might or might not be connected to music, dance, acting, painting, various crafts or sculpting. Yet the arts do become the means to express the content, relationship and inter-play of different subjects.

Although all the arts within the Indian context might together broadly be categorised as performing and non-performing art forms, or performing and visual arts, there is in fact a line, nearly invisible, that separates one from the other. What might seem visual in the form of a painting or other craft has more often than not had a link with performance. One, does not, after all, hear the lilting recitation of arithmetic that the weaver sings to him/herself while he/she weaves a motif. The mask does not bring alive the character central to a performance as it does in a ritual or dance, when it hangs on a wall far removed from context. What might decorate the walls of a drawing room in urban settings could very well be

something steeped in belief, ritual and philosophy in the rural milieu. Be it the *par*[3] which becomes the focal point in the performance of a Rajasthani folk narrative, or the Puruliya Chau[4] mask without which the Puruliya Chhau performance is meaningless, the performative and the visual are well-knit. These 'objects of craft' may not be meant to be considered in isolation. But a curious mind might want to inquire what it is essentially or whence it came. It is, of course, beyond doubt that while on the one hand one does recognise the close link between performance and visual, the difference between the two is sufficiently discernible to consider them independently.

In the performing art forms such as the Siddi Dhamal[5] and Teyyam[6], performance and the visual fuse, inseparably. There are the classical performing art forms, where the performance itself becomes the visual. The visual is the performance. The element of 'visual' performance is, of course, more prominent in dances like Kathakali, Odissi, Kathak, Bharatanatyam, Mohiniattam and Manipuri. The visuals that music creates are varied and very different from the visuals that a dance creates. A singer like, for instance, Gangubai Hangal, who is a small-built person off stage, would gain a giant size during performance. The visual that the Shehnai maestro, late Ustad Bismillah Khan, created in performance with his entire group of co-performers was a powerful picture, difficult to forget. The performances of the *kabeerpanthi*s[7], Prahalad Singh Tippaniya's troupe, are spell-binding. The colourful turbans of a group of Manganiar singers create both images and imagery. Then, in its stillness a painting moves, speaks, performs and creates imagery. It is a visual, which might change every time one turns to look at it. The peformative element seems, indeed, to exist in everything. In order to recognise this performative element it is necessary to develop a discerning eye, a receptive ear and a sensitive mind. To understand and appreciate the arts needs preparation. The required preparation would no doubt be holistic in nature – a preparation most appropriate for the comprehensive development of the child.

Validating the Arts

What has been the purpose of these performing, non-performing and visual art forms? Why have they always been a part of the psyche? What is it that makes them so important within the Indian social structure? And if they are as important as they do seem, why is one so hesitant in accepting them as a part of academics?

Looking for a 'purpose' in the arts is like wanting to know what the purpose might be in daydreaming. Why should one desire to reach the tip of Mount Everest or why would one want to fly beyond the stars? What urges the boatman to sing while he rows his boat and what makes a grandmother want to take a child into the fantastic world that her stories weave? While analysing daydreams might shatter their non-being, the arts often make analysis necessary. Daydreams could be described as pleasant, wandering thoughts that distract one's attention from the present, whereas the arts are

outcomes of social activity. They are expressions or applications of creative skill and imagination through visual mediums such as painting or sculpture, or through performance such as music and dance, or acting. An art form is a conventionally established form of artistic composition, such as an oral or written text, which could be presented as a narrative composition depicted through a *pata chitra*[8] or rendered through *kathagayaki*[9], as is done in the *Pandavani*[10]. Thus, the arts are subjects of study concerned primarily with human culture. This makes it necessary to investigate them "against the background of physio-geographical realities, racial strands, agricultural functions and social organisations which have contributed in giving them a distinctive character"[11]. Parallel existence of variegated, complex streams of performing and visual art forms has created multicoloured pictures. If one views the arts as a creation that has no purpose or meaning beyond itself, it becomes what in popular parlance is known as art for art's sake. Antithetical to this is the view that the arts are a blueprint for a better society. They have a purpose beyond being a mere display of creativity. Each of the arts – irrespective of whether they are performing, non-performing, visual – has inherent values. This makes each art a source for education, holistic in nature.

Performing and non-performing art forms in India have, down the ages, been coupled with the community's world view. They have been handed down from one generation to the next, creating an oral tradition of transmitting knowledge. Within the performing arts, singing, playing of musical instruments, dancing, acting, recitation, narration, acrobatic feats along with visual components such as crafts, attire, weaving, drawing and painting, make-up, design – these merge into a single whole. Ironically, down the years, each integral unit has been, segregated from the other. This segregation might have achieved the small aim of giving these areas an individual status as solo art forms. But it has, in the process, tended to reduce their size and stature. Each of these areas has a philosophy, sociology, history, language, vocabulary and a cultural idiom, fusing to become an integrated whole through rendition or depiction.

The Cross-curricular Character of the Arts

There are two ways of looking for a relationship between the performing arts and the other subjects. One way would be to look for the arts and aesthetics in areas of other subjects, for investigating to what extent the arts have been

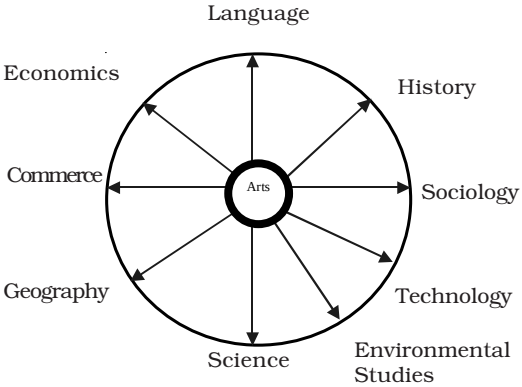

Fig. 1: *Looking for the arts in different subjects*

integrated in the text. The drawing below shows how it might be possible to do this. Some difficulty might be encountered since the sciences and humanities, as well as commerce and economics, are today highly specialised subjects. How much space do they really leave for incorporating the visual and performing arts?

There is also another way of doing this. Would it not be simpler to look for different subject areas in the performing and visual arts? This would need analysing the arts in a manner such that various fields associated integrally with the arts are highlighted. This would enable teacher and student to view an art form beyond immediate performance.

For example, the Sidigoma dancers hail from Africa and are followers of the Sufi mystic Baba Gaur. It should be interesting to trace not only the history of this community but also the geographical route the community took to come to India. It should be of considerable interest to the student to analyse the language in which they sing,

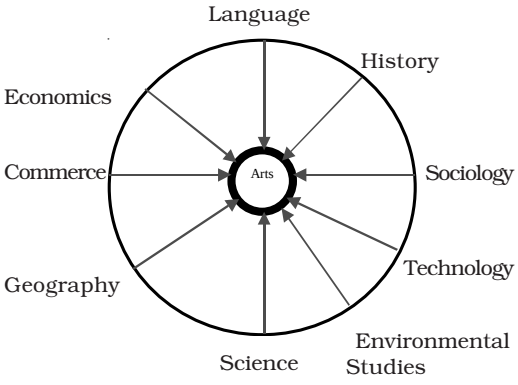

Fig. 2: *Looking for other subjects in the arts*

their philosophy and world-view, and the social circumstances that designed their performance. It might also be of interest for the student to understand how a way of life could become an art form, and how, by turning into an art form, it could acquire commercial value. This might explain also to some extent the connection of the arts with economics and commerce.

The student may also be interested in discovering how deep-rooted sociology is in community arts. Innumerable forms of expression emerge because of social reasons, because of integration with the environment in which a community is located, and are representational of cultures and worldviews unique in nature. They might be occupational by nature, and at the same time symbolise a way of life that supports their very existence. For instance, the Tippani dance of Chorwad in the coastal area of Saurashtra is in fact the consequence of an occupational behaviour pattern. Floors and ceilings of houses in olden days were not made of cement but of finely pounded limestone, or *chuna*. Women pounded it rhythmically with a stick to which was attached a disc called *tippani*, in order to turn the *chuna* into fine powder. Songs accompanied the rhythm of the pounding, making the hard work relatively easy. When cement and other material replaced this traditional mortar or *chuna*, what remained of the pounding-work were its movements and accompanying songs. The *tippani* is now a musical instrument. This dance form – danced by women – is called *Tippani Naach*.

It thus becomes significant to examine performance holistically,

because within the concept of holistic performance are a large number of areas that might be diverse in nature, but are closely linked to each other within as well as outside the bounds of the art form. Separating them from each other would mean removing them from their prime context. Considered thus, it becomes essential to recognise an art form's links with other subject-areas such as language, history, geography, sociology, psychology, philosophy, mathematics and the sciences. This would, in turn, take these closer to the performing arts, without their being considered in the curriculum as extra-curricular, non-scholastic, co-scholastic or non-cognitive. While an extra-curricular activity could be likened to a hobby, which can be pursued in addition to the normal curriculum, the word non-scholastic implies that which does not help academic achievement and does not support learning of any high level. It is not involved or related to scholarship. The word co-scholastic indicates an added interest that goes also with other more 'meaningful' subjects. Non-cognitive indicates not being fit enough to be acceptable as supporting, or facilitating mental action or process of acquiring knowledge through thought, experience, and the senses. Thus, to tag these adjective on to the arts would be a derogatory act.

It would also be necessary to consider the difference in concepts such as 'arts *in* education', 'arts *and* education' and 'art *as* education'. One would have also to go beyond using the arts as simply a *tool* for education. While using the arts as an educational tool might be productive in conveying a lesson to the student, care needs to be taken to prevent the arts from becoming merely a tool. Art as instrument would have to be used with adequate precaution, so that it is not damaged in the process.

ENDNOTES

1. Lorblanchet, Michel (ed.). 1988. *Rock art in the Old World.* Papers presented in Symposium A of the AURA Congress, Darwin (Australia). Indira Gandhi National Centre for the Arts, New Delhi 1992, p. iii.
2. Stites, Raymond S. 1940. *The Arts and Man.* McGraw-Hill Book Company, Inc. New York. p. 154
3. http://kalarte.com/india/ra-c/ra-ctext.html Kalarte Gallery: India *Par (paintings on cloth) from Rajasthan*
   The Rajasthani *par* (sometimes spelled *phad*) is a painting on cloth that is a visual accompaniment to a ceremony involving the singing and recitation of the deeds of folk hero-deities in Rajasthan. *Pabuji ki Par*s depict exploits from the life of the folk hero Pabuji Rathor. The legends are painted on long rectangular cloths that may be 35 feet long by 5 feet wide. The bard-priest known as *bhopa* recites incidents describing the exploits of Pabuji from the epic and is assisted by his wife and son or another person who points to the scenes on the *par* about which he is singing.
4. http://www.accu.or.jp/ich/en/arts/A_IND7.html *AsiaPacific Database on Intangible Cultural Heritage* Purulia Chhau is a vibrant and powerful folk dance form with an inclination towards theatre. The use of mask in the dance makes

it more attractive for the audience. The use of masks in this form of Chhau, remains to be its focal point even today. The making of these masks is an independent art altogether. It needs a gifted artist to visualise the mask and then give shape to it.

5. The Siddhis are a unique community settled along the coast of Gujarat in Bharuch, Bhavnagar, Junagarh and Surat. Descendants of migrants who were brought here in the 12th century from Africa, the Siddhi still retain their native sense of rhythm and fluid grace. Dressed in grass skirts and adorned with peacock feathers, they perform the Dhamal on the eve of the *urs* of their prophet Baba Gaur. As the dance gains tempo the dancers perform various feats of skill. The climax of the performance culminates in the Siddhis tossing coconuts in air only to break them on their heads. They even walk on fire.
6. Teyyam is a ritualistic dance in Kerala With its rare and fantastic make-up and costume, lively foot work, gymnastic fervour and ritualistic vitality it represents the folk life of Kerala.
7 Followers of Kabeer, who sing his verses.
8. http://orissagov.nic.in/e-magazine/Orissareview/nov2004/englishPdf/raghurajpur-craftvillage.pdf.
The *patachitra* as the folk painting of Orissa is called has a history of great antiquity. Raghurajpur, a small village in the Puri district, is known for its *patachitra* artists and has therefore made a unique place for itself on the cultural map of India. They exhibit the use of strong lines and striking colours on pieces of treated cloth, dried palm leaves or paper painted by the *chitrakara*s. The paintings depict themes of Indian mythology.
9. This is the art of singing out a narrative giving, it a balladic structure. It is the recital of a mythological story or a folk tale.
10. http://indiaheritage.org/perform/folk_pandavani.htm
Pandavani is the form of story-telling belonging to Chhatisgarh, which serves as a means of both entertaining and educating the people. It narrates the story of the five Pandava brothers (protagonists of the epic *Mahabharata*). A team of Pandavani performers consists of one main narrator-singer and one or two musician-cum-singers, who play on the *tabla* and the harmonium. The main narrator-singer holds a *tambura* (stringed musical instrument), decorated with small bells and peacock feathers in one hand and *kartal* (a pair of cymbals) on the other.
11. Vatsyayan, Kapila *Traditions of Indian Folk Dance* Indian Book Company, New Delhi, 1976 (pg. 9).

Constructivism and the Pedagogy of Education for Peace

A Reflection on School Education Curriculum Reform (NCF–2005)

SAROJ PANDEY*

Abstract

This paper has been developed against the backdrop of National Curriculum Framework – 2005, which envisages major paradigm shift from behaviourist approach to learning to constructivist approach that lays stress on the personal experiences of learner in the process of knowledge construction. The role of teacher in this approach has shifted from the transmitter of knowledge to facilitator of knowledge. The NCF – 2005 also emphasises on education for peace, not as a part of value education as traditionally been integrated in schools, but, as an independent value in itself. The paper highlights the implication of this paradigm shift in the approach towards learning for promoting the culture of peace as, both, the constructivist approach and peace education are associated with the humanistic philosophy which is dedicated to developing more mature and self-directed learner – a pre-requisite for living together. To develop a culture of peace, the pedagogy of education needs to be broad, diverse and oriented towards lifelong learning. Active listening, problem-solving, and conflict resolution skills help in inculcating feeling of living together, which are also basic to the constructivist way to learning. Therefore, the epistimological shift suggested in the NCF – 2005 provides greater opportunity to promote the culture of peace than ever before.

Peace has been one of the most desired necessities of human life since time immemorial. Since the advent of organised society human beings have strived for it, and are even more united today in their quest for peace, harmony and a better quality of life. A strong need is being felt by educationists, philosophers, scientists and political leaders to rejuvenate the human values, which may bring long lasting peace on this planet. The insistence of Delor's

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report (1996) on *Learning to live together* as the central pillar of education is the indication that education must be geared to promote a culture of peace, tolerance, democratic values, human rights and duties among students. The National Curriculum Framework – 2005, strongly advocates education for peace at all levels of schools.

Peace, however is an elusive concept having different interpretations in different cultures as well as different connotations for the spheres in which peaceful processes are applied. It ranges from inner pace to outer peace. Consequently, the interpretation of peace ranges from absence of war, and society without structural violence to liberation from exploitation and injustice of any kind, ecological balance and conservation and peace of mind, etc. Education for pace therefore includes a variety of issues like human rights education, environmental education, international education, conflict resolution education and development education, etc.

A review of programmes on education for peace in different countries indicates that they differ considerably in terms of ideology, objectives, emphasis, curricula, content and practices, etc. for instance, in Australia, education for peace focuses on challenging ethnocentrism, cultural chauvinism and violence and promoting cultural diversity, nuclear disarmament, and conflict resolution (Burns, 1985, Lawson and Hutchinson, 1992). While in Japan it targets issues of nuclear disarmament, militarism and the nature of responsibility for acts of violence performed in the past (Murakami, 1992). In South America, education for peace addresses structural violence, human rights and economic inequality (Garcia, 1984; Rivera, 1978) and in the United States, it is often concerned with prejudice, violence and environmental issues (Harris, 1996, Stomfay-Satitz, 1993).

In India education for peace programmes have traditionally been concerned with promoting certain core values. Mahatma Gandhi envisaged a non-violent society, which would be free from exploitation of any kind, and can be achieved through the instrument of education. In Gandhian concept of peace-truth, non-violence, self-suffering and means and end relationships are important. The educational policies of the country lay stress on combative role of education in eliminating obscurantism, religious fanaticism, violence, superstition and fatalism, and promote some core values such as India's common cultural heritage, egalitarianism, democracy, secularism, equality of sexes, observance of small family norms and inculcation of scientific temper, etc. Peace and living together have been integral part of Indian way of living and manifested in its Constitution through various articles. It firmly believes that inculcation of certain values among younger generation would help them to exist in the dynamic socio-cultural fabric with peace, harmony and prosperity. This is the reason why all commissions and committees on education in India, like, the Radha Krishnan Commission (1948-49), Mudaliar Commission (1952-53), Sri Prakash Commission (1959), Kothari Commission (1964-66), Sampurnanad Commission (1961), Rammurti Committee (1992) and Chavan

Committtee (1999), etc. make important recommendations for incorporation of value education at all levels of education. Consequently, the National Curriculum Frameworks of 1975, 1988 and 2000 had adopted a value-oriented approach to integration of peace concerns in education.

A major shift in this approach is witnessed in the National Curriculum Framework – 2005, which considers that *value education is subsumed in Education for pace, but is not identical with it.* The National Focus Group on Peace Education constituted in the context of NCF–2005 in its Position Paper on *Education for Peace* says, *"Peace is a contextually appropriate and pedagogically gainful point of coherence for values. Peace concretises the purpose of values and motivates their internalisation. Without such a framework, the integration of values into the learning process remains a non-starter. Education for peace is, thus, the ideal strategy for contextualsing and operationalsing value education" (p.1).* While accepting the traditional approach of integration of various peace related values and concern in school curricula, it further adds, that, education for peace must be a concern that permeates the entire school life – curriculum, co-curriculum, classroom environment, school management, teacher pupil relationship, teaching-learning processes, and the entire range of school activities. Clearly the NCF – 2005 is more vocal and direct towards the need of promoting peace through education than the earlier curriculum reform attempts where the concept of peace was subsumed in value education and therefore peace was considered one of the five core values that were promoted through education

The Constructivist pedagogy and NCF – 2005

Besides the thrust on education for peace instead of value education, the NCF (2005) can also be distinguished from earlier frameworks in the epistemological approach adopted for education of learners. The earlier behaviourist approach to learning has been replaced by the thrust on constructivist based learning. The constructivist epistemology is based on the premise that learning does not involve discovering the reality, but constructing the reality.

According to the constructivist theory, knowledge is being actively constructed by the individual and learning is an adoptive process based on the experiences of individual (Mayer, 1992: Hendry, 1996, 1996). Therefore, learning is not mere absorption of knowledge and learner is no longer controlled respondent to stimuli as in the behaviourist approach (Jonassen, 1999: Perkins, 1991a) but is considered as 'already a scientist' (Solomon, 1994, p. 16) who actively constructs learning while trying to make sense of the world through his own experiences, goals, curiosities and beliefs. Knowledge according to constructivist epistemology cannot be transferred intact from one individual to another and therefore, learning and teaching cannot be synonymous: we can teach, even well, without having students learning. What can be the better example of it than the present school system in the country where in spite of all teaching-learning at

schools the learning outcomes of students both at the cognitive and psycho-emotional levels are cause of concern? The mushrooming growth of coaching centres, rising number of failure in examinations and alarming levels of stress among students manifested in the form of suicide, violence against others, and other disruptive activities are indication of the inability of our education system to relate the school knowledge to real life experiences and adapt to the needs of various demanding situations.

A basic premise of constructivism is that individuals live in their own world of personal and subjective experiences and built new knowledge on the basis of their previous experiences, rather than new knowledge being imposed from outside. The role of teacher, therefore, undergoes a major transformation from

TABLE 1

Changing Epistemology of Learning

Learning	*Traditional (Behaviourist)* Learning is a change in behaviour brought out through selective reinforcement of response. It is a product and external entity.	*Constructivist* Learning is a process of subjective construction of knowledge based on personal experience of learner.
Knowledge	Passed on, transmitted, reproducible, and linear.	Reciprocally developed co-constructed, builds on prior- knowledge, spiral.
Pedagogy	Teacher centred • Evaluation & assessment of set knowledge • Practising, listening, reproducing • All students do the same tasks	• Learner centred cooperative and experiential • Doing, stating, theorising • Range of possible responses • Tasks vary among students
Motivation	• Extrinsic, grade focus	• Intrinsic, Learning focus
Teacher	• Imparter of knowledge • Asks questions • Explains concepts • Superior to learners	• Facilitator, guide • Raises questions • Facilitates students theorising • A learner among learners
Learners	• are objects that learn • Passive listeners • Rarely ask questions beyond seeking clarification of instructions	• Co-inquires • Active partners in learning • Raise questions

the imparter of knowledge to facilitator of conditions, which will help learner in the process of knowledge construction. This changing concept of knowledge, learner, and teacher has been presented in Table 1.

Clearly a major shift can be seen in the concept of learner from constructivist perspective. She/he is not a passive recipient of information rather she/he can manipulate, interpret and make sense of her/his environment using experiences. In this way she/he can construct an understanding to help her/him achieve her/his goals (Duffy and Kirkley 2004) The constructivist based pedagogical models include collaborative learning techniques, discussion forums, and jurisprudential models to clarify concepts and facilitate learning.

According to the constructivist approach, the instruction centres on the experiences of learners. Meaningful understanding occurs when students develop effective ways to resolve problems; therefore, instructional contents cannot be specified. The constructivist teacher, therefore, cannot be effective by just following the teaching method that relies heavily on breaking content into smaller components of observable and achievable behaviours, which are measurable immediately after the instruction. Instead, the constructivist teacher assumes that every learner has a unique perspective, so the notion of the 'average' learner is rejected (Bednar et al, 1992). It provides a major shift from all learners learning the same things' to 'different learners learning different things'. Pre-specified content and objectives are not congruent with the constructivist view, instead, the objectives emerge and are realised through learner's search for authentic tasks via critical thinking, reflection, and problem-solving approach. Therefore, the teacher must confront students with information and experiences that challenge their misconceptions and offer opportunities for this reflective process and augment their metacognitive capabilities. In such a situation learners are more likely to view the problem with a greater sense of ownership. According to Cey (2001), authentic learning occurs when instruction is designed to facilitate, stimulate, and recreate real life complexities and occurrences. The guiding principles of constructivism are:

- Posing problems of emerging relevance to students.
- Structuring learning around primary concepts.
- Seeking and valuing students' points of view.
- Adapting curriculum to address students' suppositions.
- Assessing learning in the context of teaching.

This process, therefore, is very effective in negotiating conflicts and finding solutions acceptable to the conflicting parties.

The NCF – 2005 provides wide scope for utilisation of the personal experiences of learners in day-to-day school activities. Expressing concern over lack of opportunities for students in the present system to share their personal experiences, the NCF (2005) strongly recommends "*the curriculum must enable children to find their voices, nurture their curiosity to do things, to ask question and to pursue investigations, sharing and*

integrating their experiences with school knowledge rather than their ability to reproduce external knowledge (p.13)". It motivates schools to "*provide opportunities to students to question, enquire, debate, reflect and arrive at concepts to create new ideas (p.18)".* These are the important steps of value clarification and conflict resolution process also, which help in removing apprehensions, mistrust and doubts about others and encourages living together. Active listening, critical thinking, problem-solving and conflict resolution are the skills emphasised in the context of education for peace, which are also the thrust of constructivist way of learning and promoted in NCF – 2005. It strongly feels that "*schools must be marked by the values of equality, social justice and respect for diversity, as well as of the dignity and rights of children*" (p.81).

Expressing concern over the neglect of child's local context in the present school practices the NCF (2005) recommends "*we emphasise the significance of conceptualising education or situating learning in the child's world, and of making the boundary between the school and its natural and social environment porous. This is not only because the local environment and child's own experiences are the best entry points into the study of disciplines of knowledge, but more so because the aim of knowledge is to connect with the world" (p.30).*

A central strategy for constructivism is the creation and encouragement of collaborative learning environment, which provides opportunities to learner to develop, share, compare and understand multiple perspectives of an issue. Conscious efforts are made by the teacher under constructivist approach to cultivate non-threatening learning environment (Watt and Bentley, 1987) that facilitates students' knowledge construction process. Teachers in this situation are required to display respect and care for students' learning and students knowledge construction process is facilitated by encouraging them to discuss, explain and evaluate their ideas and procedures. The NCF – 2005 provides opportunities for such learning experiences to learners – right from the pre-primary stage to higher secondary stage. It lays stress on problem-solving, dramatisation and role-play, etc, which remain under explored strategies of teaching in the present system. It recommends *"in order making the process of learning participative, there is a need to shift from mere imparting of information to debate and discussion. This approach to learning will keep both the learner and the teacher alive to social realities" (p. 54).*

Triangular Relationship between NCF – 2005, Constructivism and Pedagogy of Peace Education

Education for peace is fundamentally dynamic, interdisciplinary, and multicultural in nature and aims at developing knowledge, skills and attitudes needed to achieve and sustain global culture of peace. Promoting the culture of peace calls for developing skills among learners for active listening, problem-solving, and conflict resolution. These skills need to be developed early in learners and nurtured continuously. The personal experiences of learners, therefore, have to be honoured and treated as a base for dialogue and new

learning. It is essential to note at this point, that, when we talk about peace we expect at least three basic conditions – communication, cooperation, and confidence – the process of making these three conditions work is peace building. Therefore, peace is like the bridge that facilitates the process of communication and helps in developing closer relationship between people. Education for peace does not teach students what to think, but rather how to think critically. In the process, its holistic and participatory approach draws more from the constructivist than traditional curriculum designs. It aims not to reproduce but to transform, and is a continuous process dedicated to the enormous task of improving the spiritual, as well as material quality of life of people. Both constructivism and Peace education are associated with the humanistic philosophy, which is dedicated to developing more mature and self-directed learner who is conscious of his/her rights as well as the rights of others and his/her duty towards others, and emphasises lifelong learning. The promotion of culture of peace calls for a transformation of motivational orientations of students from competition and conflict to cooperation and mutual understanding (Unfortunately the whole ethos of our existing educational institutions is more geared towards competition which encourages a win lose orientation to conflict and a strong motivation to win which fuels conflict). In such cooperative orientation, the sense of interdependent communality of interest, mutual understanding, tolerance, cooperative conflict management and resolution are encouraged through effective communication, problem-solving, and negotiating behaviour. All these pedagogies help in knowledge construction; development of deeper understanding and insight into the problem and have been emphasised in NCF. Education for peace represents a humanising process whereby individuals overcome their violent instincts. It teaches respect for life and living together, it helps to develop among students a positive self-image, sense of dignity and self worth, sense of responsibility for self and others, and a capacity to trust others.

The learning process in education for peace is understood primarily as experiential and activity-based rather than by rote memorisation or by repetitive conditioning. We shall be very clear in our minds that we cannot indoctrinate peace. The learning models for peace are logically built on the assumption of human nature, i.e. learners are sentient beings that actively participate in the learning experience; they also learn through reflecting cases, reading and examples (J.Synott, 2005). To put it precisely they learn, both by, practical engagement and interaction, as well as also, by processes of reflection and abstraction. Clearly the existing teaching-learning strategies followed in our schools which reduce learners to passive listeners and emphasise rote memorisation do not fit into the pedagogy of peace education, instead, constructivism where there is strong emphasis on behavioural skills, such as, conflict resolution (Carter, 2000; Chetkon- Yanoov,2003), dialogue (Freier and Sharl,1987) and participatory

processes that are central to learning experiences, is more appropriate for promoting peace. The National Curriculum Framework – 2005 promises ideal situation for practising these pedagogies which are directed towards developing an independent, mature and reflective learner by providing opportunities to learners to question, debate, reflect, and arrive at concepts or create new ideas. The guiding principles for curriculum development of NCF are:

- Connecting knowledge to life outside schools;
- Ensuring that learning is shifted away from rote methods;
- Enriching the curriculum to provide for overall development of children rather than remain textbook centric;
- Making examination more flexible and integrated with classroom life; and nurturing an overriding identity informed by caring concerns within the democratic polity of the country.

These principles provide ample scope and opportunity for schools and teachers to design curricula to give greater ownership to learners in their process of learning.

Clearly a triangular relationship can be established between constructivism; education for peace and NCF – 2005. With emphasis on learner centreed, learner directed, collaborative, supported with teacher scaffolding and authentic tasks it provides suitable opportunity to promote culture of peace and tolerance amongst students than ever before. Though promoting peace is very complex and difficult task, especially, in the present local and global scenario where violation of human rights, violence, intolerance, and fundamentalism is increasing day-by-day and has become an order of the day, nevertheless it does not discourage the efforts to enable learners to process various information rationally and act as responsible citizens of the State than being carried away by emotions and narrow caste, class, regional, and religious orientations. National Curriculum Framework – 2005 expects developing such mature learners through constructivist learning strategies.

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Religion, Education and Peace*

RADHIKA HERZERGER**

Abstract

Religion today has become an easy outlet through which people vent their hatred and thus become a source of violence ironically against its very essence of universal love and peace. Since hatred and violence are rooted in greed, turn up in the most insidious forms within the individual self, education has an important role in inculcating the values of peace among the students while unlearning greed and aggression. The presentation espouses the educational philosophy of Jiddu Krishnamurti's and the Rishi Valley School, a project guided by his philosophy to promote the culture of peace. In the wake of the growing problems brought with the assertion of renewed identities founded on religion and also the various problems resulting from human negligence, for example, the degrading eco-system, etc. Krishnamurti's vision could be translated into reality of today.

The world's religions unanimously talk about peace, but when religion becomes a source of violence the people must take stock of the situation and seize the responsibility for re-examining its ideals of peace, especially in a country such as India, the majority of whose population is religious. Equally important is the obligation to examine these ideals conjointly with the actual, on the ground violence. Of greatest importance is the need to embed the continually renewed ideal of peace into different aspects of education, into both the implicit and explicit curriculum of study. It is an educator's primary responsibility to reconstitute schools in such a way that peace becomes an overriding presence within its premises. Indeed if peace is to accompany schooling there has to be interdependence between the ideals of peace and the reality of violence, the gaps that divide them cancelled out. At this difficult moment in human history, the burden of carrying out this programme falls on the state, which designs educational policy; on administrators, who wield direct authority on the ground;

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* This is a written text of a lecture delivered by Ms Radhika Herzberger on First Zakir Husain Lecture at RIE Mysore on 19 January 2007. It has been published by the NCERT in the form of a booklet.

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on teachers, who exercise authority and on students, who stand at the bottom of this heavy superstructure.

The need for continually re-examining the notion of peace is particularly crucial to the enterprise of education today because the survival of civilisation depends on good education. Current scientific research predicts cataclysmic events following global warming – rising sea levels will gradually inundate coastal cities, wipe out island states, displace millions of people. Social scientists tell us that violent conflicts are inevitable in such a scenario. Which country will provide refuge to the Maldives population if their island home drowns?

The full impact of failing natural ecosystems will be felt by the generations that we educate today; it is therefore only right that we take measures to avert this grim future with intelligence. Human beings are products of culture as well as nature. To avert tragedy and to live in peace with each other and with nature, humanity will have to discover a new balance within itself. The present generation of educators needs to cultivate a long vision, and to create a culture that supports nature instead of further ravaging it.

Other questions relevant to this line of thinking about peace help enlarge the framework for examining the concept. Are war and peace opposites, and is peace merely the absence of conflict? Since violence, with roots in greed, turns up in the most insidious forms, globally, locally, systemically, and within the individual self, where does one begin to address the issue of peace? These are questions I have inherited from the founder of Rishi Valley School where I have worked for almost twenty-five years. In the course of this presentation I will focus on the issues of war and peace in the context of education. The aim of education at this point in human history, as I see it, is to establish a culture of peace in schools. For me peace means more than the absence of overt violence; I look upon it as a living presence that demands change and renewal of the human spirit.

The view that the education of the young is filtered through culture dominates current thinking in education. Robin Alexander puts it this way –

... drawing on the insights initiated by Vygotsky and Bruner and consolidated by later cognitive and cultural psychologists, we have replaced the view of the developing child as a 'lone scientist', who learns by interacting with materials ... by one of learning as necessarily as a social process, In this, significant others – parents, teachers, peers provide the mediation or intervention which scaffolds and takes forward the child's understanding' (Alexander 2006 p.15).

Jerome Bruner further maintains that educators emphasise the central role for 'narrative', by which he means stories, songs, drama, fiction that give cohesion to a culture, and which help individual students 'find an identity within that culture'. 'Knowledge,' he says, 'is not simply thinking and the result of intellectual activity and experience, it is the 'internalising of tools that are used within the child's culture (Bruner, 1996).

'How one conceives of education, we have finally come to recognise, is a function of how one conceives of the

culture and its aims, professed and otherwise' (Bruner 1996: ix-x).

Bruner's separating out of what a culture professes and what it allows in practice creates spaces for questions, analysis as well as the liberty to shape culture. Given the environmental crisis, education will have to create structures that undo present attitudes to nature and create a culture that recognises and honours human dependence on sound ecological systems. The future of humanity depends on teaching coming generations to listen and learn from nature, on models of growth that are ecologically sound, on repairing the damage done by their forefathers to natural systems. In short, educators need to acknowledge that a radical change is necessary and that attitudes will have to change, cultures liberated from the violence they implicitly contain. It is certain that with the onset of modernity, particular sub-cultures have to accommodate tenets and norms beyond those that are an organic part of their own history. Universal principles, such as, respect for nature, equal rights for men and women are examples of these principles that culture groups are obliged to uphold. The pertinent questions in this context remain: whose stories, whose songs and theatre shall we, in a complex culture like India's, teach? And what are the cultural practices and values that need to be unlearned? And how is this unlearning to be effected? Given the vast religious, class and caste divides in this country, how we in India understand the word 'culture' is neither easily described and nor universally acknowledged.

India, with its myriad groups competing to assert their separate identities, defies an educator's intellectual compass; and so the present top down formalistic approach that offers abstractions in the form of national heroes and modern development successes in competitive contexts that reward aggression. The official line that India stands for 'unity in diversity' may be a truth waiting to be born, if we educate our children to stand together in solidarity for purposes that serve universal interests while preserving differences.

Human societies can come together to solve global problems of species depletion, soil erosion, air and water pollution, and rebuild their relationship to nature, if knowledge is united with values aimed at restoring ecosystems back to health and the task of education then is not only to design curricula that are Earth centred but also to teach students how to unlearn habits and worldviews born of greed and aggression.

My plan is to investigate these connected issues in two parts – I will first describe an educational project in the interior of south India, guided by the philosophy of Jiddu Krishnamurti. The attempt here will be to illustrate the manner in which one school has promoted a culture of peace by applying the philosophy of its founder to address the complex issues of poverty and ecological degradation that face the local population. The second section will contain an exposition of Krishnamurti's educational philosophy. I will present him as a deep ecologist who explored the nature of intelligence and human interactions based on this intelligence.

The unusual procedure of placing practice before theory flows from features in Krishnamurti's discourse that escape systematic analysis. Krishnamurti did not present his point of view in a clear expository manner. He had doubts about philosophy's speculative programmes. He was an iconoclastic thinker who fashioned a discourse of his own, the chief purpose of which was to challenge both the intellectual and emotional pre-suppositions of his audiences. In Kafka's moving words, his books and talks served as 'an ice-axe to break the seas frozen inside our soul.' For him, theory and practice were interdependent, meant to support each other: peace was a living spiritual presence, which had its own action. One might, following Abhinavagupta's commentary on the *Dhwanyaloka*, describe Krishnamurti's understanding peace as an aesthetic flavour (*santarasa*) that hangs over places where all life is welcomed, and whose inhabitants abjure violence, and seek to live a life of dedicated to doing the right thing.

The role of culture in building identity took several of our modern religious thinkers into the past. Unlike Swami Vivekananda and Sri Aurobindo, who attempted to create an Indian renaissance through spiritual revival of Hinduism, Krishnamurti distanced himself entirely from the nationalistic spirit they had espoused and from the traditional vocabulary they used. Instead, in an entirely new departure for a religious thinker, he embraced modernity — its sceptical spirit, its emphasis on everyday life, and its focus on the individual as opposed to the group. Holding on the one hand that the process of modernisation was inevitable, he denied on the other that permissiveness, nihilism and extreme forms of relativism were certain to follow in its wake. Krishnamurti sought to embed his vision of a 'good human being' in the practice of education.

Rishi Valley School was established by a philosopher of Indian origin who was educated with some pomp and ceremony by Annie Besant and her international group of Theosophists in Europe. Intended for the great universities of Europe, Oxford, Cambridge, or Sorbonne, Krishnamurti's academic record was dotted with failures. By the time he left Europe for America in 1922 he had forgotten his native Telugu. In 1922, having abandoned his scholastic career, he crossed the Atlantic and arrived at the Western coast of the American subcontinent, in Berkeley. He was dazzled by the place, by its sheer beauty as well as the sense of equality he perceived in the academic community. It seemed to him that the New World had created a people who transcended all 'odious distinctions' of class, race, and gender, so endemic in the Old World. The young man's thoughts travelling to India, he wrote, 'Oh! For such a University of California to be transplanted to India'. If his native country had something to give to such a place of learning, it lay in the gift of being able to 'create the proper religio-scholastic atmosphere.'

Not long afterwards this visit to California, the search for a place to locate his educational institution led Krishnamurti to south India, to the little town of Madanapalle where he was born. Twenty-five kilometres from there, in a small valley carved out from the

scattered hills, on the edge of the Mysore Plateau, he located the landscape where he hoped to lay the foundations of the 'religio-scholastic atmosphere' he had not found in California. The place was dry scrubland prone to drought, even famine, inhabited by stonecutters, shepherds and cattle farmers.

Sacred shrines built by these ancient people stood scattered all over the valley. Under the shade of neem trees, four thin slabs of stone not more than a foot high are arranged to form a rectangular space that encloses mother goddess stones; the goddess is propitiated with blood sacrifice of cocks and, during prolonged droughts, with goats.

The goddess Gangamma has a larger whitewashed temple. The majestic neem tree under which it stood was destroyed by a storm a few years ago and replaced by a Durga seated on a lion. Her step-well, so beautifully lined with dressed stones, remains dry throughout the year.

A classical temple to Krishna situated in the only traditional village Thettu gives the valley a hint of classical antiquity. It was not the temple, however, that drew Krishnamurti to Thettu Valley, but a three-hundred-year-old Banyan tree, which dominated the stark scene and the wooded hills that stood like sentinels at the western end of the valley. The disjunction between the primeval Thettu landscape from the urban vitality of a great university in the New World could not have been more complete.

In the 70 years, since the land was acquired for the school, the landscape has changed. The track that encircles the valley, where shepherds drove their flock of sheep and goat to distant forests, is now broader. It is still used by herdsmen, descendants of the same people, but also by rattling lorries and buses. A part of this road is paved. There is a small row of peepal trees on either side of the road, but the virgin forests on the hills are slowly disappearing; during the summer months goatherds trim these trees for their flock; local women have to walk long distances for fuel. There are many bore wells belonging to the school and the more prosperous landowners. The school and its urban population now dominate the valley. The Valley telescopes time, modernity mingles with many layers of tradition. As we shall see it represents in miniature the layering of cultures, which is a hallmark of social development in the past.

D. D. Kosambi, that doyen of Indian historians, more than fifty years ago observed that the telescoping of time, in other words, the contemporaneous existence of many stages of human development from the past is a general but unique feature of India's history. According to Kosambi, India is a country of "long survivals": 'People of the atomic age rub elbows with those of the chalcolithic,' he observed as he travelled on the Deccan Queen in the early fifties from his home in Pune to the Tata Institute of Fundamental Research in Bombay, (now Mumbai) and went on to prove that the ancient Buddhist caves along the Western Ghats followed the migratory patterns set out by older generations of Neolithic tribesmen.

The school established in 1931, consisted of English-speaking, fee-paying students from India's successful middle classes. Gordon Pierce, the principal of Rishi Valley and founder of the Public School Movement in India,

enlisted Rishi Valley into the elitist body in the Fifties. Yet, from the very beginning the Rishi Valley landscape lacked some fundamental qualifications of Indian residential public schools. It is not located in the temperate zone, in hill stations made fashionable during the colonial period. Though standing at an altitude of 2500 feet, it was an area in Rayalseema, where drought turned the surroundings brown, the bald granite rocks radiated the sun's heat, and villagers walked with their cows through the school campus. India's colonial past was nowhere present in the landscape Krishnamurti chose. And yet the students who attended his school were products of several generations that had benefited from the colonial presence.

The consequences of educating students in an ivory tower oblivious to the world's suffering remained with Krishnamurti as the school's population in due course increased to roughly five hundred inhabitants, students born and bred in the urban centres of India and well-educated teachers from some of the best institutions in the country. Krishnamurti's talks to students were filled with sharp portraits of village life meant to challenge students. 'Have you ever', he asked them, 'observed the poor people, the peasants, the villagers, and done something kind—done it spontaneously, naturally, out of your own heart, without waiting to be told what to do?' (LA, p. 29).

If we were to educate students without regard to the poverty in the Valley we were in danger of falling under the category of omnivores, as defined by the ecological historians Madhav Gadgil and Ramachandra Guha (Gadgil and Guha, 1995). The classification of India's population into omnivores, ecological systems people and ecological refugees is based on the comparative consumption patterns and access to resources of the urban and rural elite and the urban and rural poor. Nearly four fifths of the population of India are poor, either ecological people, dependent on nature's dwindling resources or ecological refugees forced out of their own locality by the encroaching industrial civilisation. The majority of our fee-paying students and some of our teachers and administrators belonged to Gadgil and Guha's first category of omnivores.

The results of the urban-rural divide are best described in a recently published work by Guha —

India is in many ways an economic disaster zone; marked by high rate of deforestation, species loss, land degradation, and air and water pollution. The consequences of this abuse have been chiefly borne by the poor in the countryside – peasants, tribals, fisherfolk, and pastoralists who have seen their resources snatched away or depleted by powerful economic interests (Guha, 2006, p. 232).

Narpat Jodha's research in several dryland districts of the country adds another frame of reference to our view of surrounding village life. On the basis of comparative study of villages with vital common property holdings, he concludes that these shared resources support between 15-25 per cent of income of the poorer farmers and shepherds in dry region. He makes out a strong case for governments to replenish Common Property Resources in the countryside, as they provide both food security and

additional employment. In a joint paper with Anupam Bhatia, the authors mourn the systematic depletion of the commons 'closely associated with the depletion of social capital, i.e. the community spirit and actions reflecting reciprocity, trust, shared values, net working and group action' (Jodha and Bhatia, 1998).

The above writers place our location a certain perspective that we had to address if education is to stand for the values of peace with justice. Krishnamurti, who did not by principle create a blueprint for any of his schools, leaving the implementation of his visions to the school's location and to the talents of the people running it, concentrated his thought on the moral dimensions related to schooling. In typically metaphorical fashion he warned those in charge of the school against the tendency of an isolated educational institution becoming self-enclosed. 'Don't be a community,' he admonished, 'There is something aggressive and self-centred about them. Instead keep your doors open.' A community has to define itself; self-definitions set up boundaries excluding those who fall outside the defined essence. Krishnamurti wanted his school to keep its `doors open'. Closed doors and impenetrable walls are made up of exclusive ideals, class and caste prejudice. Its structures are held together by comparison, and the desire to dominate others; greed, envy and a lust to dominate support group consciousness. He made the question, 'how should we live?' central to his educational enterprise. How should we as individuals live and what should be the school's relations with its neighbours? – these questions moulded the school for the past several decades.

The realisation that the direction Krishnamurti was setting for his school went against the spirit of the present age, against parents' urge to get the best for their children, against India's aspirations to become a global player was all pervasive. The following quotation from a very recent articulation of this trend, by a blue ribbon education commission set up to re-think American education reflects the educational policies in several countries, including our own. 'There is this growing mismatch,' the report says 'between the demands of the economy and what our schools are supplying.'

If we continue on our current course, the number of nations outpacing us in the education race continues to grow at its and current rate, the American standard of living will steadily fall relative to those nations, rich and poor, that are doing a better job (The New York Times, December 15, 2006).

The pervasive anxiety driving reform was described earlier this year by the columnist Thomas Friedman:

Computers, fibber-optic cable and the Internet have levelled the economic playing field, creating a global platform that more workers anywhere can now plug into and play on. Capital will now flow faster than ever to tap the most productive talent wherever it is located, so every country is scrambling to upgrade its human talent base (New York Times, March 24, 2006).

In such a climate of international competition, governments see investment in education largely as a way of enhancing the country's GDP and by individuals as commanding the best international jobs. Earlier ideals of liberty, equality and fraternity take a back seat in the nation's priorities. The

aims of education are dictated by the idea of a 'knowledge society' that caters to the knowledge-based economy towards which nations are racing. This is a business model of education where knowledge as a commodity is to be traded.

The late Management Guru Peter Drucker predicted more than a decade ago that in a future world order knowledge and information would be paramount. Both the conception of what constitutes knowledge and the yardsticks by which knowledge and values are to be measured, will be placed at the disposal of business.

The acquisition and distribution of formal knowledge will come to occupy the place in the politics of the knowledge society which acquisition and distribution of property and income have occupied in the two or three centuries which we have come to call the Age of Capitalism (Drucker, 1994).

Peter Drucker readily acknowledged the dangers inherent in a future where business interests forge the yardsticks of knowledge and its value. How difficult, he admits, it will be for 'the knowledge society to give decent incomes and with them dignity and status to non-knowledge people... After all,' he acknowledges, 'knowledge workers will amount to no more than a large minority of the workforce.' (Ibid)

We, in India, need to pay particular attention to Peter Drucker's dismissive remarks about 'non-knowledge people,' given that India's impoverished villages have a tradition steeped in culture, in stories, songs, drama, fiction that, in Jerome Bruner's words, give cohesion to a culture, and that help individual students 'find an identity within that culture.'

India may have the world's largest illiterate population but the poor in India do not lack culture – poets like Kabir, Tukaram, Jayadeva and the great epics are not the exclusive preserve of the well educated; they are sung by poor weavers and itinerant bards; and the shadow puppeteers of Andhra Pradesh reflect the classical mural paintings at the Lepakshi temple.Jodha additionally argues in favour of a critical role of traditional knowledge systems in the management of forest resources, and the harm produced by 'marginalisation of traditional knowledge, and imposition of generalised solutions from above' (Jodha, 1998).

Unfortunately, the pressures of modernisation with its global vision and its lumbering bureaucracies, its drive for universal standards in elementary schools set to the drum beat of nationalist ideologies stamp out local, more ancient cultures and, in the process, alienate students from their ecologically sound wisdom, the complex patterns of protecting, sharing and conserving natural resources developed over several hundred generations.

Jodha's point that peasant and shepherd communities are not rootless people, but could have a vital role in the unfolding scenario adds yet another dimension to our thinking about our rural world, and helped structure the direction of our work.

Prime Minister Manmohan Singh is well-aware of problems in the countryside, the fact that income ratio within the urban and rural India has risen from 1:2 at the time of

independence to 1:4 today. (Reported in the financial pages of Asian Age, 18 November, 2006). In his address to Cambridge University worked through the consequence of a policy that has the potential to ignore the basic interest of the majority of India's population, he stated:

"The gap between the rich and the poor is widening. This, coupled with the inability of the public sector to provide adequate and quality services in health and education, and cater to the needs of the poor, is causing resentment and alienation. This is nurturing divisive forces and putting pressure on the practice of democracy. These are real and palpable concerns and they cannot be ignored. Ladies and gentlemen, I suggest to you that we address these vital concerns by making globalisation an inclusive process. We need to work for inclusive globalisation. This calls for a new global vision".

The juxtaposition, which finds graduates from the best educational institutions in the country living side by side with ancient but impoverished village settlements, provides a unique opportunity to work through a new global vision based on J. Krishnamurti's thought. For a start, our location in a degraded landscape brings to the people at Rishi Valley, students and teachers belonging to India's urban middle classes, the reality of India and presents a challenge of a long-range agenda for regeneration through education. That agenda has served to guide our efforts by teaching us to care for the earth, to share our educational resources with our neighbours, to conserve local species of plants, and to help them rebuild green spaces in their villages.

'Rishi Valley is more than a school', the founder once declared long ago. In this extended context of Rishi Valley's relationship with its neighbours the Founder's philosophy and the needs of a drought area with marginal farmers and shepherds have converged to create a promising model of integrated development through resource sharing. In this conception, the school is a resource centre for the neighbourhood.

In what follows I shall try to outline a case study of an educational project that through its 75-year-old existence worked towards a 'global vision' of an entirely different order.

We have articulated the following aims for educating teachers and students in our school. These goals derived from Krishnamurti's philosophy, are consonant with the times we live in.

- To awaken a sense of responsibility for the environment in teachers and students, by making them aware of the fragility of their environment.
- To create in students and teachers a sense of responsibility for other human beings.
- To urge students to employ the expertise they might acquire in science to 'repair' the damage done to the environment.
- To create a global outlook – the environment does not respect borders.
- To cultivate a sane attitude to India's past.
- To orient students in cooperative learning, rather than in competition.
- To create a sensibility that prizes harmony and quietude.

- To convince students that going against the tide of history is not impossible.

Following through with these aims and advancing Krishnamurti's long-term perspective into the classroom required us to create our own study materials. We needed to create textbooks and worksheets that opened student's senses to nature, to the inter-connectedness between plant and animal life and between nature and human livelihoods. It also meant seeking a fuller understanding of Indian culture in the larger context of human concerns. By extension, it meant creating a right relationship with India's own pluralistic heritage, and cultivating an informed detachment from the past. In pursuit of some of these goals, Rishi Valley is continuing to develop its own educational materials in the areas of social science, ancient history, mathematics, environmental studies and rural education.

The first major publication in this new series, *Birds of Rishi Valley and Renewal of their Habitats*, highlighted many facets of our new directions in education. The book describes local and migrant birds in relation to the several different habitats now found on campus. It explains the ecology of habitat formation and renewal and it seeks to show how small scale conservation efforts can make a difference, in the landscape and in the quality of our lives. A new study on insects is now planned.

The social studies texts have overlapping aims: to show that human beings in travelling from the Stone Age into modern times, have passed through stages of technological development that still characterise surviving cultures in different parts of India. Thus, even to relate meaningfully to the immediate environs of Rishi Valley, students have to learn about an arid region inhabited by shepherds and subsistence farmers, living in patterns that have existed since Neolithic times. The universals in human nature are not neglected. Here, Charles Darwin's theory of human origins is brought in to destroy old prejudices about race and caste, by teaching that human beings have a common descent. The lesson from Darwin is explicitly brought out in the topics about prejudice.

History is becoming a contested field in many nations of the world. The education scenario in India today reflects this frantic search for roots. Our approach seeks instead to impress on students the fundamental principles of the historian's methodology, that our knowledge of the past is never absolute, that new evidence can overturn the best hypotheses.

Above all we eschew the chauvinism in favour of the virtues of detachment. In the context of history, this faculty, which Krishnamurti's thought shares with ancient ideals of life, can play a truly restorative role in situating students and teachers firmly in the present. To orient students in a broader historical context informed by present realities, to free them from false views of the past, is not to strip them of their culture but to enable them to understand their present situation with greater clarity.

Following Krishnamurti's insight that observation of nature has a fundamental role in educational

practice, the school set up an Institute of Bird Studies and Natural History. The Institute has a two-fold agenda: to cultivate a close study of nature in the students of Rishi Valley and to heighten awareness of our natural heritage on the national scene. Nature Studies have become an important activity for students. They keep track of migrant populations of birds, watch out for newcomers and have documented the breeding biology, for instance, of the Great Horned Owl and Brown Fish Owl. Research conducted by students and teachers has revealed the following data: there are 200 species of birds in the valley, 50 species of butterflies, some rare like the Blue Mormon; and a variety of reptiles, including the near extinct bridal snake.

To promote a caring attitude towards nature and birds among students and residents Rishi Valley was declared a Bird Preserve in July 1991 and since then bird studies have gained prominence. The oath we took on that occasion reads in part underlines our resolve of 'preserving, protecting and enriching the avifaunal wealth, habitat diversity and flora of the Valley as a whole.

A love of nature, freedom from the past, and a long vision, the basic virtues embedded in Krishnamurti's educational philosophy, are necessary if our future citizens are to fulfil the constitutional obligations embodied in Article 51A (g) —

'It shall be the duty of every citizen to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for wild creatures'.

It is a Directive Principle in the Indian Constitution but for the inhabitants of the Valley it should become a central tenet.

Rural Education

A new design for village education is being developed at Rishi Valley for the past twenty years. The programme is based on the premise that human welfare demands a regenerated landscape, especially in a country where the majority population lives at subsistence level, and where the produce of the earth directly enhances human well-being (Jodha, 2001).

The 'Satellite Schools' RVIEC created in the centre of hamlets around the Valley represent degraded landscapes turned into green public spaces. A typical Satellite School can host, beside an elementary school, a *balwadi*, adult education programmes, puppet shows and theatre. The schools are linked with each other and with government schools through *metric melas*, where children from neighbouring schools buy and sell food, weigh themselves and their parents, compute averages and, in the process, learn to play around with numbers. Doctors from Rishi Valley take responsibility for student health in these schools.

It is hoped that the grounds of the school, which are terraced to conserve water and planted with shrubs and trees, will partially meet part of the food and fodder needs of the village, and provide spaces for conservation of bio-diversity. One day perhaps the grain for mid-day meals could be grown on the school premises. Our eventual hope is that these schools will serve as the

nucleus for a recovery of the traditional commons, and the return of 'social capital': a wise use of natural resources that is being lost to a competitive market economy.

The Rishi Valley Institute for Educational Research, located on the Rishi Valley Campus, has created study materials suited to the educational needs of the village. A typical village school in India provides one teacher to cater to students belonging to mixed ages and ability groups. The method of teaching is textbook-centred, with the teacher dominating the classroom. Failures haunt these schools; most elementary schools count the largest numbers in their first grade.

These educational materials break down the learning process into a sequence of concrete and manageable steps. This collection of cards in elementary mathematics, environmental science and language are graded in ways that students can easily identify and work through by themselves or with minimum help from the teacher; students are self-learners; teachers merely facilitators. Respect and tolerance for other cultures and concern for the natural environment are values woven into the material.

A graphic chart described as the Ladder of Learning in at the centre of the multi-grade programme. The Ladder, in conjunction with the cards, charts the progress of a student through stages of the learning process. It registers this progression in a simple visual display that gives the child a concrete sense of progress. It is a visual metaphor that has proven to be a very effective motivating factor, as each student clearly sees herself moving onward (and upwards!) through the subject.

The Ladder guides the organisation of classrooms. It enables teachers to divide the class, not according to ability groups but to different organisational principles: fully-teacher Supported, Partly teacher-supported and peer-supported groups are clubbed separately irrespective of their ability. In an arrangement where older students and younger students are part of the same group, a great principle adopted by RIVER from J. Krishnamurti — 'You are both the teacher and the taught,' is translated into the classroom, but in different ways.

It is sometimes thought that the Ladder of Learning is a straightjacket into which all content is inflexibly strapped. It has occasionally been described as a system of 'programmed learning'. The confusion that can be cleared away by reflecting on the relationship between grammatical structures and the use of language; the rules of language do not impede an individual from speaking creatively. The Ladder's constraints are no more limiting than those imposed by grammatical rules on speech – both poets and ordinary human beings are able to speak in sentences they have not learnt before.

Forty per cent of the spaces mapped on the Ladder are left free, for teachers to fill in with the help of local content: songs, riddles, local myths and mother's tales. Puppetry and surveys of local flora and fauna are part of the enrichment routine followed by each school. Local culture, in this way, finds its way into the classroom. The school doors remain open, and local potters donate their clay elephants and horses to beautify school

grounds. A Mother's Committee takes charge of mid-day meals, hosts *metric melas* and overseas the teacher's work.

A Rural Health Centre has been providing quality primary health care to the villages in the area. The success in the immediate vicinity has drawn people from as far as one hundred fifty kilo meters away. A unique feature of the centre is nurses trained in each village to monitor that patients continue treatment. A volunteer from each of these villages receives training from the Health Centre on AIDS awareness.

These multi-grade, multi-level teaching and learning methodology has become a model for thousands of formal and non-formal schools in several parts of the country. Among the more prominent adaptations of the methodology are the famous Nali Kali experiment in the formal schools of HD Kote block of Mysore Districts and the Corporation Schools in Chennai. We have just signed an agreement with a UNICEF and *Sarva Siksha Abhayan* (SSA) supported programme for defining, designing and developing 'a holistic quality package of essential interventions for primary schools,' in several states, including Gujarat, Andaman and Nicobar Islands. Orissa, Bihar and Jharkhand.

Conservation Work

The educational work of Rishi Valley is nested in actual practice — water conservation, soil and moisture conservation, reforestation, preserving local species of domesticated cattle, use of alternative energy are all part of our work that benefits the inhabitants of the valley and introduces students to an alternative lifestyle.

Water is the Valley's greatest problem. Monsoons are erratic and the few natural streams flow only during the monsoon season and swiftly grow dry. For most of the year underground water drawn from wells is the only source of water. The ground water stood at one hundred-thirty meters below ground level, as a result of too many new wells being dug by the school's need to bathe and feed five-hundred inhabitants, maintain its dairy and by farmers who now grow paddy instead of the rain-fed millet and peanuts.

Serious water harvesting began in the seventies with the Centre donating its own land for the construction of two percolation tanks, and supervising projects financed by the Andhra Pradesh government. The two tanks, the first called 'Lost Lake,' situated midway up the hills to the south of the campus helped regenerate one hundred-fifty acres of a once-barren hillside. The other, situated in the valley, services wells three miles downstream and has resulted in a much more prosperous farming community. Five more tanks were built more recently in the Valley.

Beginning in 1988, under a grant from the Wasteland Development Board, the Centre built small check dams and bunds along the contours of an 800-hectares hillside. This meant persuading villagers to donate labour and allow construction of bunds across their small holdings. Custard Apples, which goats avoid, were planted along the bunds to hold in soil. Large nurseries of *jamun*, tamarind, *peepal*, red sander and *neem* saplings were established. Several of these were given away to farmers from

distant parts, and many others planted on hundred fifty acres of the bald hillside where Lost Lake is located. Over a period of twenty years this barren hillside is now part scrubland and part dense forest. For the local village community the hundred fifty acres hillside means fodder for its animal population and fuel wood; the space is a kind of insurance against long periods of drought. The campus that once consisted of dry lands and scrublands, now boasts of woodlands and several wetlands.

A survey of the flora on campus revealed many hundred species of plants, several of which have medicinal properties. Following the survey a flourishing Herbal Garden has been established on six acres of land. Under the care of an Ayurvedic specialist, it now has two hundred species of local bushes and trees that provide medicinal benefits to the local population. There is a concerted effort to spread the plants and restore the fast-vanishing knowledge and faith in their healing properties to nearby villages, especially among the women.

The Rishi Valley Dairy is engaging in the task of breeding Ongole cattle, a domesticated breed famous for the load carrying capacity of the male. In the current economic climate where breeding is almost entirely aimed at increasing milk yields, the species is near extinction in Andhra Pradesh. We are concerned about the long-term implications of this practice for marginal agriculture whose mainstay is the bull-driven plough.

Mindful of the limited energy resources in the country and taking advantage of various subsidies from the Government of India, Rishi Valley Education Centre has built a large *gobar* gas plant in its dairy which serves around 25 per cent of the school's cooking needs. Solar heaters for hot water serve several dormitories.

Krishnamurti, the Deep Ecologist

Arne Naess the Norwegian philosopher who coined the term 'Deep Ecology', distinguishes three types of 'Deep Ecologist' in the following —

... within deep ecology you have those who specialise on a spiritual level, saying you have to change the way you are mentally, and others say no, all the problems in deep ecology are political more or less, you have to go into politics and the third one just utters "ah, wonderful nature, wonderful nature, wonderful nature." For Naess himself, '... ecological science concerned with facts and logic alone, cannot answer ethical questions about how we should live. For this we need ecological wisdom. Deep ecology seeks to develop this by focussing on deep experience, deep questioning and deep commitment' (Naess, 1997).

Krishnamurti properly fits Naess' first category of spiritual thinkers. The main thrust of his thought was to awaken human beings from the 'obstinacy', a description used by the well-known biologist Edward O. Wilson, in which they are sunk. 'Human beings are adapted by Darwinian natural selection,' Wilson explains, 'to short-term decisions and focus on local concerns.' Krishnamurti's analysis of the human condition took in this destructive side of human nature, its incapacity to take a long view, and consider the wider implications of its own actions. But Krishnamurti tempered this

recognition with a radiant sense of human possibilities.

According to Wilson, if human consumption patterns continue at present levels we will by 2100 need four more planet Earths to 'sustain life as we know it'. And it is fairly well-established that resource scarcity results in violence. Krishnamurti addresses these issues in his philosophy of education.

The aim of education, according to Krishnamurti, is to create good human beings with an awakened sense of responsibility. The aim is not primarily to mould them into slots created by society: professional success, a comfortable homes and a respectable family life. These he dismissed as being narrow, bourgeois and second-hand; as locked into the short-term vision and incapable of resolving the problems that we as a species face. Instead he thought education should be dedicated to creating 'good human beings' with a long view.

The three main components of Krishnamurti's concept of goodness are freedom, intelligence and responsibility. And all three are the outcome of the right kind of learning. Learning, for Krishnamurti, is both a positive faculty and a negating capability. Learning is positive because it teaches you about yourself and the world. It is a negating capability because it allows the darker impulses that guide human nature, greed and violence, to dissolve.

Krishnamurti's response to a student who asks him, 'How can we know ourselves?' helps highlights both aspects of this faculty. The first step in the process, as he explains very simply, is to observe as one might in a mirror 'the way you talk, the way you behave, whether you are hard, cruel, rough, patient' (Krishnamurti, 1974, p. 76). The mirror reveals what one is, but problems take hold when one begins to disapprove of what the mirror shows. 'The mirror says, this is the fact; but you do not like the fact. So, you want to alter it. You start distorting it.' (Krishnamurti, 1974, p. 76). Attention is silently watching what the mirror reveals, without the desire to change it. When this silent observation comes into being there is freedom from anger, envy and the pettiness that clouds the mirror. 'Look', he says, 'not with your mind but with your eyes' (Krishnamurti, 1974, p. 23).

Over and over again, distinguishing what is artificial or socially constructed from what is natural, Krishnamurti directed students to nature and to the senses. The senses are tools for cleansing the mind: 'Just look at the stars, the clear sky, the birds, the shape of the leaves. Watch the shadow. Watch the bird across the sky. By being with yourself, sitting quietly under a tree, you begin to understand the workings of your own mind and that is as important as going to class' (Krishnamurti, 1974, p. 47).

Unlearning the emotions of envy, greed, anger and ambition is the key that opens the mind to a wider and deeper reality, away from its narrow, self-centred vision. Unlearning frees the mind from its divisive actions, its tendency to look at others in stereotypical images: 'You are not a Russian or an American, you are not Hindu or a Muslim. You are apart from these labels. You are the rest of mankind' (Krishnamurti, 1987,72-73).

Krishnamurti's educational philosophy sought to uncover the

individual's relationship with society and through that with nature. He held that human beings, despite being modern, are not really individuals in the truest sense of that word; they are still driven by social forces, by the worldview derived from their elders, peers, society at large and the times in which they live. These social forces are motivated by fear, ambition, and greed. Learning about the influences that direct one's life and shedding the emotions of fear, greed, envy and anger through learning about them clears the way for compassion.

So the moral truths that Krishnamurti sought came neither packaged as true belief, nor as knowledge and theories, but were intrinsic to a spontaneously-born sensitivity to life: 'Fear shuts out the understanding of life with all its extraordinary complications, with its struggles, its sorrows, its poverty, its riches and beauty—the beauty of the birds, and of the sunset on the water. When you are frightened, you are insensitive to all this' (Krishnamurti, 1963). Krishnamurti was convinced that our shortsighted instincts can be overcome and the right kind of education can show us the way to reclaiming the Earth for future generations.

Edward Wilson recognises that our species' destructive instincts are unique; they are not shared by other species with whom we live on Earth. With Krishnamurti, Wilson also recognises that science alone cannot solve the problem human beings have created. But whereas Wilson invokes the lost instinct we share with the whole of life as the path to salvation — 'Every species, right down to nematode worms, has pretty elaborate behaviour that leads them to the right habitat at the right time. Shouldn't we find some residue of that instinct in human beings? … On some level, it is wired into us to be around nature. We should not let that instinct disappear'. Krishnamurti puts his faith in the human ability to free the mind from the negative emotions of greed and violence, as a way of unlocking the shackles that bind individuals to self-interest.

Krishnamurti's vision for humanity resonates with thinkers both from India's ancient and more recent past.

His almost nihilistic radicalism is captured by the Buddhist Nagarjuna's tribute to the Buddha in the last stanza of the *Mulamadhyamakarika*.

I prostrate before the Gautama, who, grounded in compassion, taught the true dharma in order to destroy all opinions (or all points of view).

His great passion for nature with Tagore's idea of India's civilisational values.

Contemporary Western civilisation is built of brick and wood. It is rooted in the city. But Indian civilisation has been distinctive in locating its sources of regeneration, material an intellectual, in the forest, not the city, India's best ideas have come where man was in communion with trees and rivers and lakes, away from the crowds. The peace of the forest has helped the intellectual evolution of man. The culture of the forest has fuelled the culture of Indian society. The culture that has arisen from the forest has been influenced by the diverse processes of renewal of life that are always at play in the forest, varying from species to species, from season to season, in sight and sound and smell. The unifying principle of life in

diversity, of democratic pluralism, thus became the principle of Indian civilisation.

Not being caged in brick, wood and iron, Indian thinkers were surrounded by and linked to the life of the forest. The living forest was for them their shelter, their source of food. The intimate relationship between human life and living nature became the source of knowledge. Nature was not dead and inert in this knowledge system. The experience of life in the forest made it adequately clear that living nature was the source of light and air, of food and water (Quoted by Vandana Shiva, 1988, p. 55).

Krishnamurti's idea of a school with Open Doors recall Gandhi's idea of Trusteeship, some of the basic principles of which were codified under the Mahatma's direction:

Trusteeship provides a means of transforming the present capitalist order of society into an egalitarian one. It gives no quarter to capitalism, but gives the present owning class a chance of reforming itself. It is based on the faith that human nature is never beyond redemption (Dantwala, 1986, p. 40).

Conclusion

The urgent need of the hour is vividly described by Mark Edwards, who has been following environmental issues for close to forty years.

Humanity will have to put aside the deep divisions it has maintained for thousands and thousands of years and take practical steps to solve this problem. The prize will be to deflect military spending, currently one trillion dollars of global taxpayer's money a year, to pay to reinvent the modern world so that it is compatible with nature. This would require a coalition of those in the peace movement, environmentalists, those who support the campaign against poverty – and the silent majority. They have to find their voice. Unless they do, a hard rain's a-gonna fall (Edwards, 2006, p. 8).

If what Peter Drucker predicts is true and the world is moving towards a knowledge society then knowledge will have to be harnessed to nurturing the Earth, not savaging it. Krishnamurti suggested this transformation would require that human beings unlearn the habits of thought bred by greed and aggression.

"Indian society seemed to develop more by successive religious transformation than by violence", Kosambi remarks, adding that society "failed to develop further for much the same reason" (Kosambi 1956). India might have emerged as a more homogeneous society in the twentieth century, if its mode of development in the ancient world had been more like that of European cultures — if overt violence had been an instrument of subduing the cultures of technologically less advanced people.

There was rarely the bitter, violent conflict between the most primitive and the most developed elements of society in India that one finds in the devastating interaction in the devastating interaction of Spanish conquistadors . . . with tribal cultures in South America (Kosambi, 1956, p. 8).

Kosambi's attribution of a positive role to religion in India is intriguing, coming as it does from a historian with a Marxist view of history. But then Kosambi was an historian for whom the relationship between theory and

empirical data was one of interdependence; ideology did not take precedence over evidence; history he said 'is there for those who have the eyes to see it.'

Going on to illustrate with multiple examples which need not concern us here, Kosambi ended the first chapter of his *An Introduction to the Study of Indian History* with a quotation from Marx wherein he congratulated the philosopher's foresight into the consequences of British colonial rule for the future of India. The colonial legacy 'of railways, and machine production, a new Indian bureaucracy, bourgeoisie, proletariat, and army', would certainly remake the subcontinent, but would not bring any change the material condition of the people.

India's cultural pluralism, which began in the ancient world, was achieved at the cost of hidden violence that positioned caste groups into hierarchies, assigning strictly defined ecological niches to each group. *Jati,* like species, in this pre-Darwinian enterprise, imitated nature. The post-industrial era in India's history has led the country into what Gadgil and Guha describe as 'a cauldron of conflicts'. Economic and educational policies of the state have neither levelled the field for all individual citizens nor provided opportunities for advancements to the poor. The cauldron of conflicts is the result of competition and conflict over limited resources. The Indian reality only reflects the larger picture in the world where nations compete over resources and spend their wealth of weapons of power rather than on servicing the Earth.

The statement is prescient despite the hopes of Indian statesmen who dreamed of erasing the hierarchical structures and hidden violence in India's ancient societal structure when the new constitution adopted after independence enshrined the concepts of liberty, equality and fraternity.

Education based on a spiritual non-divisive philosophy of J. Krishnamurti can play a positive role that D. D. Kosambi recorded in his historical reconstruction of India's past. J. Krishnamurti, as the following quotation illustrates, defined the problems of education in a holistic framework.

The world of nature and the world of man … are inter-related. Man cannot escape from that. When he destroys nature he is destroying himself. When he kills another he is killing himself. The enemy is not the other but you. To live in such harmony with nature, with the world, naturally brings about a different world. This is one of the responsibilities of the educator, not merely to teach mathematics or how to run a computer. Far more important is to have communion with the world. The world may be too large but the world is where he is; that is his world. And this brings about a natural consideration, affection for others, courtesy and behaviour that is not rough, cruel, vulgar.

The world of nature and the world of man are inter-related. Man cannot escape from that. When he destroys nature he is destroying himself. When he kills another he is killing himself. The enemy is not the other but you. To live in such harmony with nature, with the world, naturally brings about a different world (Krishnamurti, 1985).

The education project at Rishi Valley demonstrates that Krishnamurti was more than a visionary; that his educational vision can be translated into a reality that is both relevant to our times and to the future.

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Reinventing the Paradigm of Teaching

Implication for Teacher Education

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Abstract

At every stage and development of education, quality has always been a great concern. The great Indian thinkers emphasised on developing inner potentials of individuals. The NCF-2005 states that the curriculum must enable students to find their voices, nurture their curiosity to do things, to ask questions and to pursue investigations, sharing and integrating their experiences with school knowledge rather than their ability to produce textual knowledge. ICT provides to play an active role to the students necessary for quality learning. The web-based teaching-learning practice is the art, craft and science of using network technologies. It provides to the students a wide range of scopes for integrating varied learning experiences and making learning a holistic one.

Introduction

The progress of any country depends upon the quality of education offered and its practices. Indian education was well known for its Gurukul system of education in the Vedic age. Education in India has undergone various phases and stages of development starting Vedic age to post-independence period. At all stages of development there was a concern for bringing in the quality education reflecting on the practical aspects in education. The great Indian thinkers also emphasised on developing inner potentials of individual by reflecting on unique potential of individual. Getting educated is solely dependent upon the individual teachers role to set conditions, generate environments for learning.

School education till 1976 was under the State control and centre would advice state for policy issues. Latter the Constitution was amended to include education in the concurrent list. The NPE 1986 recommended for a common core component in school curriculum throughout the country and NCERT was given the responsibility for developing National Curriculum Framework and

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review the framework at regular intervals. In spite of the various recommendations as per NPE 1986 the school education remained to be exam oriented, bookish and information loaded devoid of practical aspects. The recent National Curriculum Framework–2005 focuses on the following issues:

- Connecting knowledge to life outside.
- Shift from rote learning to constructing knowledge.
- Providing wide range experiences for overall development of a child.
- Bringing flexibility in the examinations.

The development in technology has changed the world outside the classroom; it is more eye-catching and interesting for a student than the classroom setting. As a result students find classroom instructions as dull and devoid of life and do not interest them for learning. The information technology has made learner WWW afflicted:

WWW Share discoveries and discussions.

WWW Continually provide students with enrichment outside of class hours.

WWW Provide follow-up on weekly activity schedules.

WWW Maintain instructions for groups and individuals.

WWW Encourage students to make more efficient and intense use of computers.

Teacher has a tough time to arrange for different kind of learning experiences for catching attention of students, persisting their motivational level, energizing them to work in new situations with limited resources.

As per *National Curriculum Framework–2005*, "The curriculum must enable children to find their voices, nurture their curiosity – to do things, to ask questions and to pursue investigations, sharing and integrating their experiences with school knowledge rather than their ability to produce textual knowledge".

The most important aspect of learning are developing capacity for abstract thinking, reflection and students learn in variety of experiences like reading, experimenting, listening, thinking, reflecting, writing , expressing oneself in speech, etc. Thus, conceptual understanding can be developed by engaging students actively in learning process. Active involvement involves exploration, enquiry, questioning, discussion, reflection leading to creation of ideas. Hence, before the teacher the challenge is process of active involvement and learning various concepts. The curriculum framework emphasises developing critical thinking among students making them active learners this can be made possible by taking advantage of ICT and working on multiple intelligence models.

Emphasising Critical Thinking by way of Multiple Intelligence in Educational Practices

The above mentioned discussion indicates that the new curriculum framework is very decisive about developing critical thinking. Critical thinking emphasises the ability and tendency to gather, evaluate and use information effectively (Beyer, 1985). The researches conducted in the area have identified several distinct skills

related to an overall ability for critical thinking.

Finding analogies and other kinds of relationships between pieces of information. Determining the relevance and validity of information that could be used for structuring and solving problems. Finding and evaluating solutions or alternative ways of treating problems. There are several generally recognised "hallmarks" of teaching for critical thinking (Beyer, 1985; Costa, 1985) like:

Promoting interaction among students as they learn – Learning in a group setting often helps each member achieve more.

Asking open-ended questions that do not assume the "one right answer" – Critical thinking is often exemplified best when the problems are inherently ill-defined and do not have a "right" answer. Open-ended questions also encourage students to think and respond creatively, without fear of giving the "wrong" answer.

Allowing sufficient time for students to reflect on the questions asked or problems posed – Critical thinking hardly ever involves sudden judgments; therefore, posing questions and allowing adequate time before seeking responses helps students understand that they are expected to deliberate and to ponder.

Teaching for transfer – The skills for critical thinking should "travel well". For this teachers should provide opportunities for students to see how a newly acquired skill can be applied to other situations and to the student's own experience.

Further, if we have a look at the Gardner's 'Theory of Multiple Intelligences' it encourages educators to start thinking of intelligence as a set of many different abilities and skills that help an individual learner comprehend, examine, and respond to many different types on content in order to solve problems or to make something that is valued in one or more cultures (Checkley, 1997). Gardner notes that individuals do not necessarily have the same strengths in each area and can improve at each of the intelligences. Gardner makes it clear that his theory merely describes a learning behaviour and should not be labeled as a learning style. He states that learning styles are "claims about ways in which individuals evidently approach everything they do...You could say that a child is a visual learner, but that's not a multiple intelligences way of talking about things. On the contrary "here is a child who very easily represents things spatially, and we can draw upon that strength if need be when we want to teach the child something new." (Checkley, 1997).

The passive way of learning fails to engage student in his/her own learning. A learner-centred approach in which students take a greater responsibility for what goes on in their own minds and hence are responsible for their learning. "The ways in which intelligences combine and blend are as varied as the faces and personalities of individuals" (Edwards, 1995). Both student and teacher must find active ways to tailor each individual's multiple intelligences to best acquire new concepts, ideas, and knowledge.

The boon of technological developments should be taken in the education process to promote learning.

TABLE1

Multiple Intelligence and Internet as a tool for learning (Edwards, 1995)

Bodily/Kinesthetic	Navigating through software- or web-based scientific inquiries, dissections, and Web Quests with the use of a keyboard, joystick, mouse
Interpersonal	Collaborating online via list serves, chat rooms, newsgroups, and e-mail
Intrapersonal	Computer assisted instruction; simulations that only rely on the computer's response, self-assessments, designing homepages, and word processing class assignments.
Logical/Mathematical	Generating database and spreadsheet programmes; Engaging in problem-solving software; Using online calculators; Utilising multimedia authoring programmes.
Musical/Rhythmic	Listening to *.wav, MPEG, or MIDI files associated on software and Web pages; Creating presentations that require the recording of sound(s). editing of video.
Naturalist	Using real-time images of the natural world as a basis of a comparison study; Digitize images or the natural world captured on videotape or digital camera.
Verbal/Linguistic	Comparing online articles from scientific journals, magazines, businesses, schools, and independent sources; desktop publishing, voice annotations, and speech output.
Visual/Spatial	Designing and interpreting graphical layouts; Using draw- or paint programmes; Charting data in spreadsheet applications; Capturing/manipulating images from a digital camera, video, scanner, or web page; Manipulating objects in three dimensions using JAVA script.
Existential	Art replica, planetarium, stage drama, classic literature, classic philosophy, symbols of world religions, virtual communities, virtual art exhibits, virtual field trips, virtual reality, simulations.

As technology provides a wide scope to cater to the individual differences as can be seen from Table 1.

Thus, multimedia and internet is a boon for teachers to structure lessons that reach all students which are not met in the traditional classroom. ICT provides a support to the student to take an active role in the learning process and strengthen all of the multiple intelligences necessary for quality learning. ICT applications open up a whole new world of discovery and learning. The Internet provides both an ideal resource and platform for developing critical thinking by way of multiple intelligences. Not only planning the lesson activities but also many of the classroom activities may find a place on the Internet for student use. Even

TABLE 2

Internet Based Multiple Intelligence (MI) Activities (Sally Bergman, 1995)

Logical/Mathematical	Analyse statistical historical data, create graphic representations of historical data, create hyperlinked timeline.
Verbal/Linguistic	Compose essays, poetry, etc. for publishing on web page, critique written resources through an annotated bibliography.
Visual/Spatial	Construct thematic web pages that include various visual images (e.g., posters, political cartoons, broadsides, photos, illustrations), construct hyperlinked timelines and maps.
Musical/Rhythmic	Analysis of song lyrics, composition of song lyrics, design and publish Power Point presentations which incorporate music and visual elements.
Body/Kinesthetic	Internet-based simulations, cooperative web searches or web quests, role-playing activities that incorporate Web resources, classroom presentations.
Naturalist	Design virtual landscapes; analyse computer simulated topographic cities, maps, etc.
Interpersonal	All of the above activities that might be designed to incorporate cooperative learning in groups.
Intrapersonal	All of the above activities that might be completed through reflective individual projects.

TABLE 3

Worldwide Web MI Resources (David G. Lazear, 1996)

Logical/Mathematical	Charts, diagrams, government reports, statistical demographic and population data.
Verbal/Linguistic	Government documents, personal narratives, historical documents, letters.
Visual/Spatial	Maps, diagrams, illustrations, battlefield representations, historical timelines.
Musical/Rhythmic	Lyrics or audio files of patriotic, protest, period and other historical music.
Body/Kinesthetic	Illustrations and descriptions of historical costumes, cooking, dance, etc. for role-playing or simulation.
Naturalist	Illustrations, paintings, maps, personal narratives and photographs of historical and contemporary environments.
Interpersonal	All of the above resources that might be used in cooperative MI activities.
Intrapersonal	All of the above resources that might be used in reflective, individual MI activities.

Gardner believed the potential impact of computer technology would not be felt until the next century, 2013 to be exact (Howard Gardner, 1999).

Table 2 and 3 depicts how Internet could help teacher in preparing lesson plans with an entirely different dimension. The promise of marrying technology with the pedagogy is one that can be realised today. The Internet based pedagogy gives a scope to the teacher to incorporate flexibility to meet individual needs.

Steps to Incorporate WWW in the Teaching-learning Process

- Step one would be to collect multimedia Web sites. Generally referred as Hot list containing bookmarked sites that are most useful, interesting, and/or peculiar for a given topic and a variety of learners.
- Second step would be the collection of online newsletters, desktop slide presentations, and Hyper Studio stacks that would focus on providing links to a variety of subject-related multimedia resources. All these can be grouped together in a Multimedia Scrapbook which is built around what the individual learner defines as meaningful and helpful.
- Third step to target specific-learning behaviours using online multimedia resources by posing questions that motivate students and generates curiosity for learning. Treasure Hunt as designed by teacher where students are given a list of specific sites that hold information that appeal to several multiple intelligences and are essential for understanding a given topic.
- Fourth step the Subject Samplers where teacher presents six to eight captivating Web sites organised around a main topic. Students develop a sense of connection with the topic because they are asked to respond to Web-based activities like to explore or compare interpretations of pictures, data, or sounds and share (by posting online) experiences they have had.
- Fifth step Web Quests help students go beyond learning basic facts. It requires student to work in groups with a challenging task, provides access to an abundance of online resources and scaffolds.

Networked technologies add new dimensions in organising learning experiences:

- Revealing the quality resources.
- Preparing students for the work environments of the future.
- Networking at various levels like among students, among faculty, and among students, faculty, and professionals beyond the University.

Thus, web-based teaching-learning practice generally called as Webagogy is the art, craft, and science of using networked technologies. As it is rightly pointed out by Boettcher (1997) "Now that the Worldwide Web is providing a whole new context for teaching and learning, we have the need to return to the core principles of teaching and learning, and create a new model of teaching and learning. Technology, applied in conjunction with pedagogical concepts can create an effective student-

centred environment and enhance Learning outcomes.

Carr (1997) agrees with Boettcher: 'without appropriate pedagogy, use of High capacity communication services cannot provide significant Improvements in learning outcomes. In general, it is the pedagogy that provides for learning, not the technology or the software alone.'

But there are various issues of web-based learning which needs to be taken care by the teacher like intellectual property. Using educational tools appropriately and obtaining the necessary permissions from its owners would be essential. Another major problem would be of security should to protect networked systems, login IDs and passwords should be kept private and servers and scripts designed to preventing hacking. Every individual learner on the net has a right to privacy which must be respected.

Pedagogy is primarily associated with, formal school education. There are significant differences between the two terms pedagogy and wabogogy in terms of independence/dependence of the learners, resources for learning, motivation, and the role of the teacher. Context of learning is important, as learning is context and situation-specific. Web-based teaching provides a materials-based educational experience, which means that although it can be a material-rich, and stimulating, learning situation it can also be a socially poor and lonely, learning situation. (Kirshner and Whitson, 1997). Hence learning depends upon the will and the learning style Gardner, 1985 preference of the learner. Some learners will undoubtedly thrive in the new liberating learning situation, while others will hesitate. Here lies the important role to be played by the teacher to monitor, interpret and then to try to alleviate such situations. The teacher' s role in Web-based teaching has already been identified as being very different from the teacher' s role in formal education, with words like facilitator, referring to the person who is online and interacting with the students in various ways. It may be the same person who produces the materials. Also the on-line teacher will need to arrange range of activities in which they will engage students, and a range of roles which they will fulfill. In Web-based teaching the teacher would be engaged in preparation and organisation of the materials-based on same kind of assumptions about the learners as are done by the textbook writer.

In Web-based teaching the personal dimension can be taken care by teacher by way of discussion forums managed and facilitated by the teacher. Of course the Web also allows students to organise their own networks for support and motivation without there being management by the teacher. This is how students learning can be made more meaningful and connected to real life experiences. Internet provides a wide range of scope for integrating varied learning experiences and making learning a holistic one. Teachers need to work out from the given topics in the textbook that could be easily dealt in the manner shown above. All these resources developed by an individual teacher could be shared in a web forum for further refining the lesson plans.

According to Plato "The purpose of education is to make the individual want

to do what he has to do" (Gardner, 1999). Every good teacher has to find better ways to motivate students and inspire quality learning in the classroom. Students enjoy tasks in which they can predict success. Thus, offering them different opportunities to draw upon their multiple intelligences strengths is an excellent way to ensure quality learning.

Students should often be given (and asked to memorize) explicit rules for classifying information. Such active learning typically results in better understanding and better retention of the concepts and related material than is possible with a more directive teaching method. One of the most important practical thinking skills is knowing how to identify a problem. Problem finding is an excellent group activity, particularly if two or more groups work on the same task independently and then come together to compare strategies. In this way, each student has the benefit of exposure to several ways of solving the problem. Enhancing the environment critical thinking in the classroom is facilitated by a physical and intellectual environment that encourages a spirit of discovery.

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A Study of Relationship between Environmental Awareness and Scientific Attitudes among Higher Secondary Students

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Abstract

The present world is witnessing a number of environmental crises, which are the result of the unmindful exploitation of natural resources by human being. There is an urgent need to create environmental awareness among all human beings to conserve, protect and nurture our environmental resources. Consequently, environmental education is included in school curriculum right from the very beginning. The present study was conducted to study the environmental awareness among higher secondary students of Varanasi district of Uttar Pradesh. The findings of the study indicated that environmental awareness has positive relationship with scientific attitude among students and science students were found more aware about their environment as compared to arts students.

Introduction

Environment is a broad term. It includes not only physical or material aspect but psychological, social and cultural aspects as well. Thus, environment consists of material and non-material surroundings of human beings.

Nature provides a limited freedom to man for conducting his exploitational activities. Man is a part of nature and hence can not exert control over nature on the basis of his free-will. When he tries to break the natural laws of nature he is bound to face the serious consequences.

In the contemporary world, the healthy existence of human society is getting worse. This state of affair is due to the unimaginably great volume of environmental maladies or problems which are pushing our planet almost to the brink of mass scale disaster of living

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beings or species on this good habitable earth. The wild storms of criminality and the volume of unsocial passions are dangerously corroding the vitality and integrity of the working people of the world. The harmony of heart has been damaged and the tribunal of conscience has been greatly demolished due to unqualitative environment on this earth. This state of environmental conditions in which the modern man lives can bring into existence unlimited ugly situations and conditions, which can devour much of the potentials of creative and healthy lives of the human society.

Environmental crisis or maladies are the foremost and the most persistently challenging problems which are ready to devour the glories of human existence and are ready to wipe out the human civilisation from this earth. The present century is witnessing such problems of environment crisis which are nothing but the creation of a greedy human society which wants to exploit nature beyond any reasonable limit. Dominantly operative environmental maladies today are always active in informing man to think seriously and choose a way between creative and progressive existence or be ready for annihilation.

Efforts are being made to educate and to solve environmental problems. Environmentalists have taken up an environmental protection aspects in a serious way. It has taken a very strong position after the United Nations Conference on Human Environment at Stockholm in 1972, which was a major event for those concerned with the quality of the world's environment. One of the recommendations of the conference resulted in the creation of United Nation Environmental Programme (UNEP) while other recommendations specially constituted the foundation of framework for cooperative efforts on international level which states that environmental awareness may be adopted by:

- Identifying, analysing and understanding the needs and problems of personal life including healthy vocation, etc.,
- Social life at different levels, viz. family, caste, community, religion, town or village life, state and country, and
- National life including civic, economic etc.[1]

To quote Sir Edmund Hillary, "It is people who create a bad environment and a bad environment brings out the worst in people. Man and nature need each-other and by hurting one, we wound the other. There is so much that needs to be done to halt the destruction of our world environment, so many prejudices and so much self-interest to be overcome".[2]

There is a folk song by Ghanshyam Shilani which starkly portrays the conditions of forests-

"Brothers and Sisters! Wake up, forest has been clean-shaved by the Government and the contractors, hug the trees, don't allow them to be cut, don't allow the wealth of the hills to be plundered".[3]

Environmental Education is a way of implementing the goals of environmental protection. Environmental education is not a separate branch of science or subject of study. It should be carried out according to principle of lifelong integral education".

The environmental education conference at Tbilisi (USSR) in 1977 identified its ultimate aim as "creating awareness, behavioural attitudes and values directed towards preserving the biosphere, improving the quality of life everywhere as well on safeguarding ethical values and cultural and natural heritage, including holy places, historical landmarks, works of arts, monuments and sites, human and natural environment, including fauna and flora and human settlements".[4]

National Environmental Awareness Campaign (NEAC) 2000-2001, started in 1986 for creating environmental awareness at all levels of the society, was continued during the year with the main theme as 'Keep our Environment Clean and Green'.[5]

'The ministry (2000-2001) interacted actively with the UGC, NCERT and the Ministry of Human Resource Development (MHRD) for introducing and expanding environmental concept, themes, issues etc., in the curriculam of schools and colleges'.[6]

The problem can be best tackled if proper awareness and attitude towards environment is developed in man and society both.

Systematised, organised and awakened social mind can be developed only through right type of education and it is through right type of education that appropriate awareness can be created to make life and its environment creative, constructive and progressive. To bring such state of mind, fostering of scientific attitude among individuals for the growth and the development of environmental awareness is essential.

The rationality, sense of curiosity, open mindedness, etc. seem to be meaningfully related with awareness in general and environmental awareness in particular. It was, therefore, decided to study in-depth the nature and extent of environmental awareness among higher secondary students and to determine how it is affected by scientific attitudes.

Statement of the Problem

The problem chosen for the study may be stated as follows:

"A study of Relationship between Environmental Awareness and Scientific Attitudes among Higher Secondary Students of Varanasi City".

Definition of the Terms Used
Environmental Awareness

Environmental awareness is the characteristic quality of man to understand and know the ins and outs of working forces and conditions of the environment.

Environmental awareness is indicative of one's conscious state of being towards one's own environment. In the present study environmental awareness includes both factual familiarity and personal variables as a composite whole. However, it has been defined operationally in the present study as follows:

Environmental awareness is an attitude towards environment which manifests itself in terms of the awareness towards:

1. Physical pollution
2. Psychological pollution
3. Social pollution
4. Cultural pollution

Scientific Attitude

In the present study, scientific attitude has been operationally defined in terms of the following six components: [8]

A. Rationality

1. Tendency to test traditional beliefs.
2. Seeking for natural causes of events and identification for cause-effect relationship.
3. Acceptance of criticism.
4. Challenge of authority.

B. Curiosity

1. Desire for understanding new situations that are not explained by the existing body of knowledge.
2. Seeking to find out the "why", "what" and "how" of an observed phenomenon.
3. Giving emphasis on the questioning approach for novel situations.
4. Desire for completeness of knowledge.

C. Open-mindedness

1. Willing to revise opinions and conclusions.
2. Desire for new things and ideas.
3. Rejection of singular and rigid approach to people, things and ideas.

D. Aversion to Superstitions

1. Rejection of superstitions beliefs.
2. Acceptance of scientific facts and explanations.

E. Objectivity

1. Observation free from personal judgement.
2. Interpretation without making any modification in present social economic and political conditions.

F. Suspended Judgement

1. Unwilling to draw inference before evidence is collected.
2. Unwilling to accept things and facts that are not supported by convincing proof.
3. Avoidance of quick judgement and conclusions.

Research Questions

The main research problem was to examine the relationship of environmental awareness with scientific attitudes. The following were the main research questions which the study attempted to answer.

(1) what is the nature and extent of environmental awareness among higher secondary students?
(2) which factors contribute to the development of environment awareness among higher secondary students?
(3) what is the relationship between the environmental awareness and scientific attitudes among higher secondary students?

Objectives of the Study

The following were the main objectives of the study:

(1) to study the nature and extent of environmental awareness among higher secondary students and factors affecting it.
(2) to study the relationship between environmental awareness and scientific attitudes among higher secondary students.

Hypothesis of the Study

The following were the research hypotheses of the study:

H_{R1}: Demographic variables like age, religion, sex, place of residence, family status, parent's occupation and parent's income affect the environmental awareness of higher secondary students.

H_{R2}: The educational variables like course of study, grade, parent's level of education affect the environmental awareness of higher secondary students.

H_{R3}: Environmental awareness has relationship with scientific attitudes among higher secondary students.

Measurement of the Variables of the Study

The independent variable of this study is scientific attitudes of higher secondary students while dependent variable is environmental awareness.

From review of related literature it was evident that although a lot of work has been done on environmental awareness and scientific attitude separately, but the researcher could not find any study which dealt with these two variables together. This study is an attempt to highlight the relationship between environmental awareness and scientific attitudes.

(i) Environmental Awareness

In this study the environmental awareness is measured with the help of 'Environmental Awareness Test', designed and administered by the researcher. Scores obtained on this test were taken as measure of awareness of the higher secondary students towards environment.

(ii) Scientific Attitude

In this study the scientific attitude is measured with the help of *Kriya Bhavichar Shailly Prashnawali* – designed by Singh, P. N. (1988).

Relationship among Variables

At the initial level, the study was concerned with the measurement of variables, selection of sample and the description of the sample. At the later stage, the study was concentrated on relationship between the independent and dependent variables, i.e. scientific attitudes and environmental awareness respectively.

Population

Population for this study consisted of science and arts students of higher secondary schools of Varanasi City affiliated to U.P. Board.

Sample

In many research situations it is not feasible to involve or measure all members of the population under study. A sample is, therefore, selected and research is conducted only on those members selected in the sample. A sample is defined as a representative part (or subset) of the population selected for the observation and analysis. On the basis of characteristics of the sample, inferences can be made about the characteristics of population in general.

The researcher selected a simple random sample from the population. This type of sample is the best representative of the population whose characteristics are unknown.

The random sample consisted of science and arts students of higher secondary schools of Varanasi city affiliated to U.P. Board. The sample of the present study consisted of 360 science and arts students of higher secondary schools of Varanasi City.

Statistical Treatment

In addition to general descriptive statistical analysis, other treatments such as F-test, t-test, correlation and multiple regression analysis were used to realise the objectives of the study. The contribution of scientific attitude on environmental awareness was estimated through regression analysis.

(1) Environmental awareness test was developed by the researcher himself to measure the environmental awareness among higher secondary students of Varanasi city.

The final form of the test consisted of 62 summated rating scale type items. Each item has five response category viz. strongly agree, agree, undecided, disagree, strongly disagree. For favourable and unfavourable items 5, 4, 3, 2, 1 and 1, 2, 3, 4, 5 scores were given respectively.

The reliability of the test was found to be 0.92 by split half method. The content, construct and intrinsic validity of the test were also established.

(2) Scientific attitude test developed by Singh, P.N. (1988) was used to assess the development of scientific attitudes of higher secondary school students. Split-half reliability of this tool was found to be 0.85 and test-retest reliability was 0.54.

After scoring, the scores were presented on two scoring sheets, one in respect of environmental awareness scores and other for scientific attitude scores.

F-test and t-test at 0.05 level of significance were applied to study the effect of various demographic and educational factors on environmental awareness and the contribution of scientific attitude in the development of environmental awareness among students at higher secondary stage is estimated through regression analysis.

Findings of the Study

The objective wise findings of the study are as follows-

Objective I

To study the nature and extent of environmental awareness among higher secondary students and factors affecting it.

Hypothesis Tested

H_{R1}: Demographic variables like age, religion, sex, place of residence, family status, parent's occupation and parent's income affect the environmental awareness of higher secondary students.

H_{R2}: The educational variables like course of study, grade and parent's level of education affect the environmental awareness of higher secondary students.

The mean was about 74.8% of the maximum score possible in this test. It means that there is more concentration towards upper half of the test.

The mean scores of environmental awareness were found to vary among the sample according to some demographic and educational variables.

The relevant statistical hypotheses were tested at 0.05 level of significance according to age, religion, sex, place of residence, family status, grade, course of study, parent's level of education, parent's income and parent's occupation. The findings related with hypotheses testing of the environmental awareness are described below:

1. There is no significant difference between the environmental awareness scores of the science group and arts group of higher secondary students. The findings of the study are as follows:

From the table it is evident that t-value is significant at 0.05 level of significance. Therefore, it may be said that Arts and Science students do differ significantly in their environmental awareness. The mean score of science students is higher which shows that they have more environmental awareness.

2. There is no significant difference between the environmental awareness scores of higher secondary students belonging to different parent's income groups. The findings of the study are as follows:

From the table, it is evident that t-value is significant at 0.05 level of significance. Therefore, it may be said that the above two groups do differ significantly in their environmental awareness. The mean score of students whose parent's income is in between 'Rs. 2,000 to below Rs. 4,500' is higher which shows that they have more environmental awareness.

Course of Study	*N*	*M*	*S. D.*	*t – value*	*Level of Significance*
Arts	180	226.09	28.75	3.86	0.05
Science	180	237.68	28.26		

(i) Below Rs. 2,000/ Rs. 2,000 to below Rs. 4,500

Parent's Income	*N*	*M*	*S. D.*	*t- value*	*Level of Significance*
Below Rs. 2,000	102	221.49	33.03	2.61	0.05
Rs. 2,000 to Below Rs. 4,500	101	232.53	24.96		

(ii) Below Rs. 2,000/ above Rs. 7,000

Parent's Income	*N*	*M*	*S. D.*	*t – value*	*Level of Significance*
Below Rs. 2,000	102	221.49	33.03	4.66	0.05
Above Rs. 7,000	91	241.37	26.48		

From the table, it is evident that t-value is significant at 0.05 level of significance. Therefore, it may be said that the above two groups do differ significantly in their environmental awareness. The mean score of students whose parent's income is in between 'above Rs. 7,000' is higher which shows that they have more environmental awareness.

From the table, it is evident that t-value is significant at 0.05 level of significance. Therefore, it may be said that the above two groups do differ significantly in their environmental awareness. The mean score of students whose parent's income is in between 'above Rs. 7,000' is higher which shows that they have more environmental awareness.

3. There is no significant difference between the environmental awareness scores of higher secondary students having parents in government service and private service. The findings of the study are as follows:

From the table, it is evident that t-value is significant at 0.05 level of significance. Therefore, it may be said that the above two groups do differ significantly in their environmental awareness. The mean score of students having parents in government service is higher which shows that they have more environmental awareness.

Therefore, the null hypothesis that course of study, parent's income, parent's occupation have no effect on environmental awareness of higher secondary students, are rejected at 0.05 level of significance.

(iii) Rs. 2,000 to below Rs. 4,500/ above Rs. 7,000

Parent's income	*N*	*M*	*S. D.*	*t- value*	*Level of Significance*
Rs. 2,000 to Below Rs. 4,500	101	232.53	24.96	2.58	0.05
Above Rs. 7,000	91	241.37	26.48		

Objective II

To study the relationship between the environmental awareness and scientific attitudes among higher secondary students.

H_{R3}: Environmental awareness has relationship with scientific attitudes among higher secondary students.

Environmental awareness and different dimensions or areas of scientific attitude were positively correlated and

Parent's Occupation	*N*	*M*	*S. D.*	*t- value*	*Level of Significance*
Government Service	190	238.33	25.89	4.57	0.05
Private Service	170	224.69	30.74		

significant at 0.05 level of significance. Coefficients of correlations between them were found as:

Environmental awareness/Aversion to superstition = 0.51582
Environmental awareness/Suspended judgement = 0.40380
Environmental awareness/Open-mindedness = 0.33653
Environmental awareness/Objectivity = 0.28972
Environmental awareness/Rationality = 0.24175
Environmental awareness/Curiosity = 0.12474

It was found that aversion to superstition, suspended judgement, open-mindedness, objectivity, rationality and curiosity were significantly related in sequence with environmental awareness. Hence, environmental awareness has significant relationship with aforesaid dimensions of scientific attitude of students.

Further, multiple regression analysis suggested six independent variables viz. aversion to superstition, suspended judgement, open mindedness, objectivity, rationality and curiosity combined in least square sense in the regression equation did in fact accounted for 33.09 % ($R = 0.5753$, $R^2 = 0.3309$) of the predicted variable, i. e., environmental awareness. It was significant at 0.05 level of significance.

Therefore, the null hypothesis that there is no relationship between the environmental awareness and scientific attitudes among higher secondary students is rejected at 0.05 level of significance.

The relationship between environmental awareness and different dimensions of scientific attitude could be studied with the regression equation in the form:

$$Y = 156.6346 + 0.1759 X_1 + 1.2481 X_2 - 0.4641 X_3 + 0.4851 X_4 + 3.6171 X_5 + 2.2324 X_6$$

Where,

Y = Predicted value of environmental awareness score.

X_1 = Curiosity
X_2 = Objectivity
X_3 = Open-mindedness
X_4 = Rationality
X_5 = Aversion to superstition
X_6 = Suspended judgement

Discussion of the Results

The findings of the study revealed that 33.09 % of environmental awareness may be attributed to the scientific attitude. Remaining portion of variance may be accounted for by other variables.

Out of various educational variables, only course of study is significantly related with environmental awareness and scientific attitude. Science group students are more aware to their environment as compared to arts group. This may be due to the fact that science subjects are more objective, rational and related to physical environment of the surroundings as compared to arts subjects.

Scientific attitude is a must for enhancing environmental awareness among the students. This fact has been emphasised by the finding that scientific attitude is higher among the students who have offered science as a subjects in their studies. Thus, it becomes imperative to include the elementary study of science specially related to environment, in the course of studies in the arts subjects.

Contributions of parent's occupation and income factors seem to be significant in the development of environmental awareness and scientific attitude as well, but the contribution of other demographic variables like age, religion, place of residence are insignificant. This naturally leads one to think that better the economic conditions of the family greater the environmental awareness and scientific attitude. In other words, poverty is detrimental to the maintenance of healthy environment and development of scientific attitude.

Thus, it appears that science education, parent's occupation and income are significantly related in the development of environmental awareness. Poverty is a significant cause of environmental pollution and anti-scientific outlooks.

About 33 % of the variance of environmental awareness may be accounted for the independent variables. Scientific attitudes, viz. aversion to superstition, suspended judgement, open-mindedness, objectivity, rationality and curiosity are important in the prediction of environmental awareness of higher secondary students. The environmental awareness is positively correlated with the scientific attitude of the students.

In the last, it may be concluded that science education, parent's occupation and income, aversion to superstition, open-mindedness, suspended judgement, objectivity, rationality and curiosity are potent factors for developing environmental awareness among higher secondary school.

Conclusions of the Study

On the basis of the findings of this study, it will be too ambitious to arrive at any definite conclusion. The findings of the study are revealing and indicating towards some conclusions. Environmental awareness has positive relationship with different dimensions of scientific attitude of higher secondary students. This means that students with better scientific attitude are more aware towards environmental awareness and vice-versa.

About 33.09 % of the environmental awareness scores of the students may be accounted for by the scientific attitude scores of higher secondary students.

It also indicates that higher secondary students of Varanasi city have developed a considerable amount of environmental awareness among themselves. Science students, students having parents belonging to high income group and students having parents in government service have developed more environmental awareness as compared to their counterparts in other groups.

Educational Implications of the Study

On the basis of a single study it will be bold to suggest some educational implications of the present study. However, on the basis of the findings of the study a few educational implications of the study may be indicated as follows:

(1) Educationist, educational administrators, and teachers must acquaint their pupil about pros and cons of environmental pollution.

(2) Formal system of education should also incorporate in its curriculum, some elements of environmental awareness programmes. This should be a compulsory part of the curriculum.

(3) With the help of various mass media and modern means of communication the concept of environmental and its protection should be published and popularised viz. news paper, radio, TV, film, etc.

(4) It would be more beneficial and effective if special programmes are launched to develop environmental awareness among the students. This is possible only through inclusion of special courses on environmental education in the schools.

(5) Value-oriented education in the light of environmental pollution and environmental awareness should be provided.

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Teachers' Expectations from their University

A Study in the Context of University of Lucknow

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Abstract

Teachers' Expectations from various dimensions of the University of Lucknow were studied by descriptive method and classified. Teachers were engaged in open conversational interview which was recorded and afterwards subjected to content analysis which yielded 27 categories of expectations which were further classified on the basis of similarities and dissimilarities into ten broad classes of expectations which have been discussed in this paper. Findings showed that the university teachers expected reforms in admission and examination system. Also, they suggested modifications in the methods of teaching, dealing with indiscipline and the present activities of associations of teachers, students and the employees. They expected upgradation of infrastructure and resources in the university especially in the areas of library, laboratory, hostel, teachers' residences and facilities in the departments. Results indicated the expectations of university teachers' to redefine the role of university in present global scenario and to review the role of vice chancellor, other officers of university, administration and duties of teachers. Several conflicting expectations were also obtained which have been discussed in the paper. The study of Teachers' Expectations from university has indicated need of reforms in the university on which the policy-makers and the stakeholders should focus their attention. The paper has suggested that periodically the study of expectations from the university should be undertaken if the stakeholders desire to make the University of Lucknow capable and useful in the fast changing scenario of Higher education in India and abroad.

A University can obviously not fulfill its role if it is not aware of definite expectations of the society. This makes a study of expectations of stakeholders of the University important for enabling the universities to fulfill their destined role. Since the teachers are probably the most enlightened class of the stakeholders, and are essential ingredients in the functioning and

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development of the University, it is appropriate to study their expectations. Such a study may provide insight for guiding the university into future operation because Teachers are the key individuals associated with the development of the university not only as mentors of students but also as the custodians of academia. This study presents a pilot investigation of the expectations of the teachers of university of Lucknow from their University.

Till now, in India, no systematic analysis has been done of the extent to which the expectations of its internal members, for example, teachers have been met. Even internationally, a little work has been done in this crucial area. Expectations from the college System has been studied by Blenda (1978) and the obtained expectations have been compared with the present achievements of the Virginia Community College System when it completed 10 years of life. The study yielded prognosis for the future of the college system as highly positive changing community conditions, industrial sector and demography. Jones (2002) conducted research on the Perceptions of University image of East Tennessee State University. The universities themselves keep on surveying the perceptions of their image held by the stakeholders. The focused groups of select members of the internal academy and the external communities were interviewed to examine the extent of congruency between and within two constituencies. Results showed that in congruencies existed between external and internal stakeholders concerning their emphasis on University image. The academy focuses on process and external constituencies focus on outcomes and products. Both these studies have valuable implications for the research on Universities in India.

Sample and Methodology

The data for this exploratory study was collected from a group of 20 teachers of the University of Lucknow. To make the sample broad based, teachers belonging to different faculties and holding different offices were included in the sample. There were 09 professors, 07 Readers, and 04 lecturers of whom 3 were Heads of the Departments, and 05 held some office of the University and two respondent teachers were the office bearers of University's teachers' association. Teachers' sample was drawn from 13 Departments belonging to 03 faculties of the university.

The objective was to explore the expectations of academicians and teachers belonging to various university disciplines and areas of administration. The respondents were contacted on individual basis to find out their expectations from the University of Lucknow. The respondent-centred, open, free and unstructured conversation was preferred for collection of data to tap the original ideas of the respondents. Whole proceedings of the conversation were tape recorded for subsequent content analysis through which the conversations were converted into audio and written transcripts, which were qualitatively studied with the help of inductive content analysis technique. This led to the distilling out of the major ideas of each respondent pertaining to the expectations. When these individual expectations were thoroughly and

inductively studied and compared together, 27 major categories of teachers' expectations from University of Lucknow emerged, which were regrouped on the basis of similarities and differences.

The juxtaposition, comparison, regrouping and synthesis of 27 categories of expectations led to 10 broad classes of expectations. While synthesising the divergent expectations, every care was taken to safeguard the originality of the idea expressed by the respondents. The act of synthesis of expectations only attempted to bring similar ideas together and to link them with each other to make a text using simple conjunctives. This was done as reliably as possible and the original intent of the respondents was maintained.

Results

The findings of the present study have been stated in terms of the modifications and reforms suggested by the respondents. Area-wise expectations of the teachers, which have been synthesised into 10 broad classes, as follows, have been discussed in this section.

Idea of the University

The University should be a place for learning, largely connected with the rest of the world, helping itself in a more concentrated way to think cohesively, coherently, imaginatively and creatively and then contributing to the society back and forth by helping everybody to reap the benefits. University should also help people to think critically in the sense about issues that concern them. So university's prime purpose must be to develop social imagination in all its constituents, i.e. teachers and its students. University education should develop skill of analysis, skill of seeking truth beyond immediate, and to dream of things which seem impossible right now. University, the soul of the society, should be a place for lot of self-critical growth and not just a technocratic managerial model of trying to create people who will fit into the group and deliver the goods. Liberation of mind is the goal of the university.

Social Function of University of Lucknow

Expected Social outcome of the University

The main objectives of the University should be the creation of knowledge, students' character building and training of manpower. Universities are not only organs of change but also an organ for developing the attitude of society and the citizens for a better future. University should take up the challenge of bringing desirable social change. University should take up extension and awareness programmes so that the public at large can be served. University needs to interact with public as well as with industry. University should provide leadership to the society. The major social outcome of the university should be to maintain the culture. Social implications of research need to be explored.

University–community interaction

It is the social responsibility of University to address the needs of the community and to improve the quality of life of its people. The students can be used to

survey and enlist the problems of the community and should be mobilised to work for them. There should be some forum for University-community interaction. Students from every department should be involved in some kind of compulsory social service and extension services. Parents should be equally involved in the affairs of the University.

Employment Generation

It was opined by some respondents that Higher Education should not be made a pre-requisite for jobs. Other respondents emphasised that the students should be so educated that they definitely get a placement in the society and is given recognition. Companies should be invited by the university to give campus placements to the students. U-G and P-G, courses need to be developed according to the requirements of the job market. Others felt that University should gear itself to the advancement of knowledge and not just for the production of employment. Generation of jobs should be the concern of vocational institutions.

Admission

To avoid undue wastage of money and manpower, the whole admission process of the University should be completed within one month. It should be planned one year before. University should be objective in admitting the students and should not yield to political pressures. Interview should be introduced somewhere in the admission process. In order to maintain the quality of education, some mechanism should be involved for filtering out the disinterested and disinclined students. University should provide for the counselling of the aspiring entrants to various classes and faculties.

Examination

Conduct of examinations need to be decentralised and the departments need to be entrusted to conduct the examinations for the courses and programmes they run. The departments should adopt a scientific and objective way to evaluate the abilities and skills of their students. Printing of question papers should be done in proper manner and effort should be made for their safe and secure upkeep. Printing should be economic; question papers should look attractive and crisp. They should be well edited and moderated. For this, the University should have its own printing press and elated infrastructure. Appointment of examiners should be done according to the declared policy of the University and the whole system has to be very transparent and fair. The university authorities should hold meetings twice a year to have proper patterns of examinations, which should be changed as per the requirement. The pattern could be like 100 to 60 questions in 3 hrs. It could be a speed-cum-power test. Some subjective questions should also be there to judge the knowledge, skills, language, expression and artistic and creative skills.

Some respondents advocated for a well-controlled and properly administered centralised evaluation system. University administration should ensure secrecy, security and efficiency in the central evaluation of the answer scripts. Whole process should be strictly

monitored and all infrastructures-cum-academic support should be available to the examiners involved in central evaluation. Students' evaluation by the teachers who teach them should be encouraged and the answer scripts of the first three merit holders should be placed in the library where anybody can see them. There should be a good discussion of the teachers with students after the declaration of examination results.

Infrastructure facilities

Library

Library should be well decorated, comfortable and supplied with the entire infrastructure required for academic work and study. Libraries should be the centres for exchange of knowledge between scholars. The university departments should transfer some part of their funds to the library. Books for particular subjects for various courses should be there in the departmental library in enough number and variety. The departmental library should fulfill the local demands of teachers and students. The general and reference books, research literature, educational journals should be there in the central library. All the departmental libraries should be networked together through local area network and ultimately they should be linked to the central library of the University. A significant part of the funds generated from the self-financing courses needs to be siphoned out for the development and upgradation of the university libraries. Central library should also have networking with the libraries of the constituent and associated colleges of the University and if possible also with, national libraries of India as well as great libraries abroad.

There must be electronic sharing and pooling of documents so that duplication can be avoided. The old book issues should be preserved in a separate store. The whole library should be computerised. New journals and e-journals should be subscribed in the libraries. There must be an information bureau in the library to help students get all information regarding study and employment at home and abroad.

University should have centrally subscribed journals, which will not only reduce the cost of research but also will contribute in updating the research and the researchers. The library should be divided into three components – arts, science and commerce at separate servers. Departments should be encouraged to participate in the library management system. The personnel and staff in the library should be professionally trained and be more cooperative. There is a need for counselling of the library personnel to help them develop positive attitude towards academics. Overall reading culture needs to be developed in teachers and students.

Hostel

There is a need to increase the number of hostels in proportion to the students. In order to restore and maintain academic environment in the hostels, library facility, with more recreative literature and books should be arranged in the hostels. Proper nutritious food should be provided to the students in the hostel mess. Students should get things

at subsidised rates. Every hostel room should have a computer and Internet connectivity. Fees submission, mark sheets, degrees all these facilities should be available in the hostel itself so that the students do not have to run and waste time. Some outdoor and indoor activities should be there to make the youths more active and energetic.

To avoid any misuse of hostels by unwanted elements and students disinclined in studies, rooms should be allotted at the very day of admission on the basis of merit-cum-requirement. Within a week after the examination, hostlers should vacate the hostels. Proper and professional management of the hostels will decrease half of the crime and violence in the campus. It should be made compulsory for the students to complete hostel dues, before they are given the degrees.

Residential Facility

The procedure for allotment of teachers' residences should be open, fair and just. Priority needs to be given to the improvement and maintenance of the residences. Quarters for Class IV employees should have at least 2-bedroom facility. Lastly, every year one flat should be built in the campus and every month at least 2-3 houses should be renovated and maintained. Every residence should be provided with a garage facility. Every block of residences should have a small park for children, a library, canteen and a community room for ladies and children.

Other Infrastructure Facilities

As far as the infrastructure facilities and services are concerned, university should keep pace with the technological advancements of the nation. While expanding the buildings or constructing new ones the aesthetics should be kept in mind. The infrastructure can be divided into three parts – as per the requirements of U-G, P-G and research students. There should be proper enlistment of all the instruments in various laboratories and it should be available to everyone.

Sports facility needs to be attended to. Minimum infrastructure should be ascertained for each department, for example, Lecture hall, conference rooms, etc. There is a need for local and wide area computer networking in the university. Hostels, departments, teachers' residences, administrative offices, library and canteen all should be networked and connected with the server. There needs to be a drastic scrutiny of non- teaching employees because there is too much overstaffing.

The university should keep pace with the revolution in Information Technology. Publishing work of the university should be done through its own state of art modern technology based publishing house and press. All the departments, units and beneficiaries of the university need global networking, Information Technology, Internet, intranet, and computers.

Vice Chancellor

A Vice Chancellor should be an educationist and an academician, a person with a vision and a mission to give a direction to the society. Vice Chancellor should be bold and an intellectual person with good administrative qualities. He must be a person who is dedicated and

committed, one who believes in the philosophy of simple living and high thinking. He should be concerned with the welfare of university's teachers, students and employees and must make them realise that he is working for their benefit.

Vice Chancellor should be respectable and work to create such congenial environment, where all teachers and students can work freely and comfortably. He must appreciate good work done by the teachers. Resource generation is also an important function of the Vice Chancellor and for that he must have new projects, plans and programmes. In order that the Vice Chancellor can perform the above functions smoothly, it is important that the society and politicians take the appointment of the Vice Chancellor as the most serious matter. The incumbents should be invited to make presentations of their vision for the university concerned and his plans for the improvement of the university.

Administration

Members from different walks of life should be members of the governing body of the university. There should be proper checks and balances in governance, administration and accounting. University administration is the area where people respect and appreciate others and their growth. There should be proper utilisation of resources and rules and University Act should be followed strictly.

Only the persons well-versed with the University's activities should be made the members of Executive Council. The registrar is the custodian of the University's records. Nature of his work is administrative not academic. Registrar should be a person who can advise the Vice Chancellor regarding the university's traditions, culture, rules, laws, etc. He should be a person who is permanent so that a sense of belongingness is developed. The respondents suggested that there should be scheduling of activities of the university, elections should be reformed, students should be made more accountable to organise certain activities, networking of teaching and non-teaching staff and accountability of teachers, heads, non-teaching staff to perform different activities.

Associated Colleges

The University should play the role of a guide for its associated colleges and the two should work as one community. The basic purpose of affiliation is that the colleges are to be fed by the university for all purposes not just for examination or degree purposes. Some respondents held the view that in order to maintain the quality of education, University should only run post-graduate and research programmes. The under-graduate courses should be either given to the colleges or any parallel university in the city may be established to affiliate U-G. colleges.

Since the university has associated colleges in the city of Lucknow only, it would be better to have some governing body empowered to check, supervise and monitor the standard of under-graduate education in affiliated colleges. There should be proper interaction and exchange of ideas between university and college teachers. University should

frequently run refresher courses and career enhancement programmes for college teachers. The office of Director, College Development Council (DCDC) should be strengthened. The university should remain in touch with college teachers through monthly meetings and other academic programmes.

University Departments

Respondents expected to have some system in the university for assessing its departments on the basis of the academic progress made by the teachers. Every department must arrange at least one seminar every month. Every year, each department should be encouraged to come out with some published work in the form of book, monograph or report. Departments should have a guidance cell not only to counsel their own students but the school students also.

Head of the Department should not be purely an administrative officer but he is a teacher, professor and academician first. The post of the Head should not be given merely on seniority basis, rather it should be work and academic output based. Head of the Department should have a vision, should be a person who has the liability to carry on the department well. This should be made a selection post as some Indian Universities are presently doing.

Autonomy

In addition to the external autonomy, autonomy within the university is also essential. The universities are also expected to set the limits and ethics of their own autonomy. What is required is autonomy with accountability and transparency with social justice. The universities should not be made accountable to a dictator but to a larger community of people itself. The university should guard against being subservient to the total undemocratic political parties alone. State interference should be less. The government should avoid red tapism to deal with the university. The University should follow a clear-cut policy of financial autonomy. Either the model of purely private universities with high fees or the model of state funded university with moderate fees should be adopted. In case of University of Lucknow, there should be more financial freedom along with accountability. Autonomy and financial autonomy are interrelated. Autonomy will deliver better goods if the University is able to generate more resources and the students' fees are decreased.

Self-financing Courses

Self-sufficiency should be the only goal behind running Self-financing courses in University of Lucknow. These programmes should not be taken as a milch cow. Self-financing courses are important means to raise finances and thereby bringing financial autonomy if funds generated are controlled and managed judiciously for the general benefit and development of the University by the Vice-Chancellor. Other alternative practices should also be employed to generate funds. A part of funds generated by self-financing courses should be utilised in strengthening infrastructure of the university departments. For example, upgradation of laboratories, purchase of equipments required for high profile research, office supplies and infrastructure like

computers, air conditioners, books, CD's, etc. The university should also take steps to discontinue self-financing courses, which are unpopular, obsolete or useless.

Teacher, Teaching and Research

University Teacher

The university should engage itself in an ongoing debate on what makes a good university teacher. How he or she should be different from a school/college teacher or an industry executive? Selection procedures of teachers should be rigorous. He/she may be included in the faculty after a week or months observation after evaluation of his vision, academic credentials and his idea of the academic and examination reforms. The prospective teacher should be required to make presentation of his vision for his discipline and the university along with his academic work, pedagogy, and publications before the selection committee.

Teachers should be updated and must have a broader vision. Orientation and Refresher Programmes should be in-built in the professional enculturation and development of the teachers. The teacher must share with the students his new knowledge and exposure of the world. Benefit of the presentations and lectures from outside experts should be continuously extended to the University's teachers. Seminars, conferences, workshops, such opportunities should be given to the teachers. The university must be liberal in giving sponsorship to the teachers to go abroad to attend workshops and conferences so that they may update themselves in this age of drastic information explosion. Quality of work should be given more importance. Only then can the teachers work with motivation and commitment. Every teacher must get his/her due timely without complaints.

The university teacher should maintain the dignity of his role. Teachers should set an example for students, should maintain punctuality and should be capable of maintaining the decency and decorum of the class. He must be able to creatively interact with people and exchange ideas.

Quality of Teaching and Teaching Methods

The University and college teachers must contribute to the Higher Education sector and all available information should be conveyed to the students in a proper manner. Along with the lecture method, there should be presentations, discussions, and interactions. There should be more classroom discussions. The new topics should be linked with the traditional topics. Some guest lecturers from abroad should be invited and students must be given opportunity to interact with them. Interactive and case method of teaching and learning should be adopted.

Application aspect of learning should be given more importance to make the students practical and to help them compete in the outside job market. There should be long hours of reading, long hours of stay and leaflets and handouts should be given to the students. Students should be motivated to read journals and e-journals. Curiosity and inquisitiveness of students should be reinforced. University by its nature is an

academic place and the faculty must try to strengthen this aspect because students will not be able to enter good vocations or jobs until their academic base is strong. Academic aspect should supersede the vocational education in the university.

The IIM model of pedagogy should be followed. The content should be transformed into cases and case studies by the teacher and then presented in the class. This will make the subject application-oriented. Prior to teaching, the teacher should give a list of recommended reading material as well as pre-planned case studies and handouts/ brief synopsis. Students should be recommended books at the end of every topic. The teacher is responsible for developing the reading material if it is not available for any topic, chapter, paper or subject. Teacher should also teach what is not available in the textbook. Internal motivation has to be aroused in the students. There should be more and more tutorials to ensure more interaction with teachers and the overall development of the students.

Of the two functions, for example, teaching and research the University of Lucknow should emphasise more on teaching. Curricula need to be revised and updated. University should help to provide opportunity for both students and teachers to enrich from global experiences and increased connectivity.

Research

Research is the most important function of the University. Research must contribute to the growth and development of individual and body and knowledge. It is believed that complete autonomy is required to generate knowledge and research work. Universities generally emphasise fundamental research, applied and action research. Some longitudinal studies solving institutional problems need our attention. There is an absolute need to conduct theme-based researches. Possibility of open-ended researches must always remain. University should arrange more funding for research. Published research work should constitute an important component of teachers' evaluation. Research is a part and parcel of the university and there should be quality research on new aspects. Teachers from different faculties need to collaborate in studies and researches of interdisciplinary nature.

Collaborations

Interactions and collaborations are important for the growth of University. First the university must enter into inter-university and intra-university collaborations. Sciences and humanities should collaborate more. Related disciplines like Sociology and social work should collaborate more. Longitudinal collaborations should also be done. Most respondents expected inter-departmental collaborations. Collaborations of university with different research and professional institutes are essential. University-college collaborations should also be attempted. Every department has a lot to learn from other departments in the same as well as other universities. Mutual exchange programmes should take place in the departments covered by UGC's Special Assistance Programmes. Groups of the departments

may conduct Inter-departmental quizzes and cultural programmes and other pogrammes of inter-university nature. There should be more sharing and exchange of views and information.

New Courses and Departments

The respondents expected the University of Lucknow to establish and run several new departments/centers/units, for example, Department of culture, Department of Human Rights, Value education, Gandhian studies, Department of Fashion technology, and Communication and Personality development cell.

Discipline

The problem of indiscipline can be tackled by adhering to the admission policy-based on the sanctioned student strength and selectiveness and devising methods to filter out the undeserving and disinclined students. Indiscipline can be checked by encouraging the faculty to have rich and sufficient interaction with students through various co-curricular and tutorial activities and providing dynamic leadership to students. Students should be motivated to develop reading habits. The university should be very particular in religiously ensuring that all the classes are arranged regularly. University should also find out the social and political roots of indiscipline and devise means and methods to cope with the situation.

Campus Life

For a good campus life students should be made to believe that the campus is safe and secure. Basic amenities have to be provided like parks, canteens, public libraries, etc. Development of a good work culture in the University will contribute to a rich campus life. A culture of teaching, research, academic freedom, congenial student-teacher relations need to be emphasised for a better campus life. There should be cultural engagements outside the university for teachers and students to create positive environment for teacher community. Enhancement of infrastructure with a sense of aesthetics will also contribute to a better campus life.

Students' Welfare and Student-teacher Relationship

Students' Welfare Services

An information bureau is must for students from where the students, parents and teachers all can get important information at one place. Secondly, there should be an Occupational Information cell where the student can update himself with all the information regarding the vacancies in the job market. There must be a 'Psychological and Career Counselling Cell' to help the students. Separate common room, browsing room with computer and Internet facility, cafeteria and gym for girls in the supervision of any senior lady professor should also be provided in the university campus and in women's hostel.

Student-teacher Relationship

More interaction should be there between students and teachers. Many problems of the University can be solved if student-teacher relationships are desirably strengthened. Teachers should

know their students' interests, aspirations, strengths and weaknesses. The gap between the two has to be reduced. The cooperation between the two needs to be reinforced. Teachers should present themselves before the students with gravity and they should take the students' viewpoints seriously.

Political Aspect

Politics and Political Interference in the Campus of the University

Being headquartered at the State capital of a big north Indian State, the University of Lucknow should guard itself from becoming playground for politicians and bureaucrats. For this the University must not yield to the undue demands and pressures of the politicians and their interference in its routine affairs. The university should discover ways and means to use politics constructively and at what levels students should get involved in politics. Therefore, in this context, there is a need for a sincere political thought and a proactive role of the University. Political awareness should be such which can make students realise what is good and bad for them. Students should be taught to think about serving the society and community, instead of getting entangled with some political party.

University students must be made aware of good corporate life under the supervision of teachers who are hostel provosts and those involved in students' welfare activities. A legal system for election of students union has to be developed after a careful thought and discussion of university administration with the civic authorities. There must be a check on the student leaders and if any illegal behaviour found, they should be disqualified. University students may try to get acquainted with various political ideologies but they should enter active politics only after completing their studies and after knowing the needs of the society. University should not be used as a political arena. Election of teachers and students should be free from political interference and they should be based on the consideration of interests of students and teachers.

Unions and Associations

The unions and associations in the university are independent democratic agencies and must work for the welfare of its members, i.e. teachers, students and employees. Their energies should be channelised towards the betterment and improvement of the system. Teachers Union should be fairer and should be sensitive towards teachers' genuine needs and must have a constructive and suggestive role to play.

In order to stop political interference in the university the students' associations should not be allowed to become local offices of the political parties and leaders. Student unions should be made more accountable by some awakening sessions by the teachers. There must also be a provision to induct in the student unions a few students who are good in studies. The employees' association should also be made more accountable. A creative suggestion was given by one respondent that the university should have only one association to safeguard the interests of teachers, students and employees. This

will balance the antagonistic interests of the unions of teachers, students and employees.

Discussion

Following generalisations, trends, gaps and conflicting ideas were obtained from the study of the findings in terms of teachers' expectations from their university.

Trends in Teachers' Expectations from University

Most of the respondents expressed expectations from the University by being highly critical of the poor infrastructure of university of Lucknow in the areas like library, labs, hostels, residences and computerisation and campus life and facilities. But they could not give concrete ideas as in what way the University should manage to meet such expectations. Most of the expectations were routine type. The progressive and modern characteristic was missing in the expectations of the teachers from University of Lucknow. In some areas like functions, curriculum, examination, admission, research, role of teachers, Vice Chancellor and administration, no striking expectation was observed.

Most of the expectations appeared dominated mostly by the local considerations. The respondents did not import ideas from the great universities and institutions of higher learning in India and abroad. This might be either due to the limited exposure and interaction of the responding teachers of University of Lucknow or the issues relating to the university did not appear to be the matter of concern of the respondents.

Neglected Areas

No expectations were expressed on the role of University of Lucknow in the national economy and the development of economic values in the students. The function of the University to provide placements and training in Entrepreneurship has not been reflected.

University education is also something beyond academics, not just meant to infuse bookish knowledge in the minds of the students. It also has a role to develop overall personality of the students (Sodha, 2000; and Varma and Soni, 2005). The respondents did not properly address this expectation

Teachers have no doubt talked a lot about their expectations regarding different important aspects, administration and authorities of University of Lucknow, but no body as such tried to throw light on what were their expectations from themselves. What was their vision about their own role and responsibility as a university teacher, and what targets, aspirations and contributions they fixed for themselves?

Nobody gave any new and creative idea regarding the schemes, modus operandi and the management of Orientation and refresher courses for transforming the teachers of University into effective professionals. The responding teachers have not highlighted the concrete steps the University is expected to follow to make the atmosphere more positive and full of energy, which can infuse the students,

teachers and other authorities with motivation and power.

Neither the respondents expressed dissatisfaction over the old and unrevised university curricula nor did they suggest upgradation of courses and programmes in the light of recent changes and researches and explosion of knowledge triggered by the ICT revolution. Also the expectations regarding innovative admission procedure, which may ensure the intake of willing and motivated students, were not touched upon. Teachers also did not expect from University of Lucknow any wholesome examination reform; rather a few respondents expected some patchwork reforms.

Conflicting Expectations

Some conflicting ideas emerged in the views of the teachers regarding some aspects, for example, examination and evaluation system in University. It was felt by some teachers that semester system of examination would be good and a continuous evaluation system should be followed. Some questioned the objectivity of this system. Another area where the conflict in the views of the teachers came forward was that some preferred objective types of questions in the examination but others were of the opinion that true knowledge can be judged only through subjective questions.

Some teachers held the view that there should be an employment and market orientation of the courses taught in the university. However, some others believed that University is meant only for academic and knowledge pursuit and not for professional courses or providing jobs or be market driven. It was also felt by some that there is an urgent need to transform the University by restricting the University to only PG studies and research. The undergraduate courses should be totally confined to the affiliated colleges. However, many of the teachers conflicted on this view and said that the University being located in technically and educationally backward region should cater to students from all strata and must continue with undergraduate, postgraduate and research studies.

Reflections from the disturbing and indiscipline role of student leaders and their supporters who are disinterested students made some respondents feel that the elections for the unions of teachers, students and employees should be totally banned in the campus whereas the others strongly rejected this view saying that these associations and unions are important for the welfare of the different groups and are necessary in a democratic setup.

Conclusion

This study on a typical north Indian residential University yielded twenty-seven categories divided into ten broad classes of teachers' expectations from University of Lucknow. Implications of the results for the University's stakeholders are that the expectations have created the need for refinements in the University in the near future so that the University becomes capable in addressing to the positively changing conditions of the community, undercurrents of globalisation of

economy and technological revolution, changes in the State and industrial sector and changing characteristics and size of the population served by the University. The model developed for the University of Lucknow may prove useful for other similar Indian Universities, with some modifications.

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A Study of the Present Scenario of Early Childhood Education in Bhubaneswar

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Abstract

The various policies and programmes of education place emphasis on Early Childhood Education (ECE). In this regard, NCERT has also come out with a 'Minimum Specifications for Pre-schools' to ensure that every school is equipped with the necessary requirements to cater to early childhood education. The present study covers ten ECE centres in Bhubaneshwar in its study to see if they meet these specifications of NCERT. The finding is hardly encouraging with most of the centres wanting in various aspects of the NCERT norms. There is an urgent need for the quantitative as well as qualitative improvement of these centres.

Introduction

The Early Childhood Education (ECE) has received special attention in the national education policies and programmes especially after the adoption of National Policy for Children (1974). The Integrated Child Development Services (ICDS) scheme launched in 1975 as a sequel to children's policy is an important milestone in the growth of ECE in the country. It got further impetus with the adoption of the National Policy on Education (1986), which viewed it as a crucial input in the strategy of human resource development, as a feeder and support programme for primary education. Consequently the *National Curriculum Framework* (NCF, 2005) states that young children be provided care, opportunities and experiences that lead to their all-round development – physical, mental, social and emotional, and school readiness (NCERT, 2005). National Policy on Education (MHRD, 1986) recommended a holistic approach for the development of the child. It also emphasised that the introduction of 3 R's and formal methods of teaching and learning ought to be discouraged at this stage (prior to 6 years. of age) and the entire ECE programme should be organised around play and child's individuality.

The NCF (2005) observes "the early childhood stage, until the age of 6-8 years

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and Central Welfare Board took steps to open pre-school centres in the name of *Balwadis* and *Anganwadis*. The number of these institutions are increasing day-by-day. Three Balwadi Training Centres at Bhubaneswar, Baripada and Koraput have also been opened for pre-service and in-service training of teachers. Most of the *Balwadi* and *Anganwadi* centres have been established in rural, tribal and slum areas. At these centres, children get free education and are supplied with play materials and Mid-day Meals.

In urban areas, English medium Pre-school Centres are predominant though they charge high fee, particularly for running such centers as they do not get any financial assistance from the Government or any other agency. Among these Nursery and K.G. schools, convent schools, Steward Schools, D.A.V. Schools, Institutes of Integral Education are quite prominent in Bhubaneswar. Apart from English medium they also impart instruction in Hindi and Oriya. They provide ample facilities for emotional, intellectual and aesthetic development of children through curricular and co-curricular activities. Indian Association of Pre-School Education have opened a Model Oriya Medium Pre-School Centre in Bhubaneswar. Some other organisations like REACH are also working to provide Pre-School Education to Tribal and Rural Children in Oriya medium. It is a good sign that many institutions and persons are now showing interest to open pre-school centres. International organisations are also coming forward to assist for the cause of Pre-school Education in the State.

The Study

Keeping in view the above observations a study was conducted in 2005-06 to find out the present status of ECE in Bhubaneswar entitled "A Study on the Present Status of Early Childhood Education (ECE) in Bhubaneswar" which encompasses the physical facilities including out-door and in-door equipments content and methodology, teachers' qualification, language skill development, cognitive skill development, creative and expressive art (music and dance, drama and dramatic plays), physical education including hygiene, health care and nutrition and provisions for social and emotional development at ECE centres.

The present study was an attempt to put forward the prevailing conditions of ECE centres in Bhubaneswar in accordance with 'Minimum Specifications for Pre-schools set by NCERT (1996), list of activities designed to assist the development of child as a whole with reference to the 'Early Childhood Education Curriculum' (NCERT,1996) and to know about the teachers basic knowledge of child development.

The Objectives

1. To study the physical facilities prevailing at ECE centres of Bhubaneswar.
2. To find out the minimum qualification of teachers in these centres.
3. To study the equipments and materials used at these ECE centres.
4. To study the content and methodology adopted by these ECE centres.

done for each item of interview schedule and observation schedule. For the questionnaire a descriptive analysis was done.

Major Findings

- 20% of ECE centres currently running in Bhubaneswar fulfill the NCERT norms, i.e. the catchment area of ECE centres without transport facility is ½ to 1 kms. and with transport facility is 1 to 8 kms.
- As precautionary measures, 90% of ECE centres have school boundary.
- In 40% of ECE centres the classroom area for 30 children is more than 35 sq.mts. The norm set by NCERT is 35 sq.mts. for a class of 30 children. Thus, out of 10 ECE centres only 4 ones fulfilled the norm.
- All ECE centres have toilet, 70 % of centres have veranda and only 10% have food storage and cooking facility in addition to classrooms.
- 80% of ECE centres display children's work on classroom walls at children's level.
- Though 60% of centres provide aquaguard facility but mostly children use their own water bottle.
- All the ECE centres have Indian type toilet with regular water supply and 80% of them provide soap and towel as sanitary facility to children.
- Only 20% of ECE centres have out-door play area of 300 to 450 sqr.mts.
- For outdoor play, 80% of ECE centres provide ball to children whereas other play materials are hardly found as shown in Table 1 given here.

Table 1: Availability of Equipment for Out-door play

Equipments Available	*No. of ECE centres*
Flying disc	3
Ball	8
Skipping	1
Cycle	2
Rope Ladder	1
Slide	3
Sand pit	2
Water Play	1
Bat	2
Clay	1
Ring Ball	2
See-Saw	1
Swing	1

- As in-door equipments, 50% of ECE centers provided building blocks to children. Other materials available at these centers were as per Table 2 given below.

Table 2: Equipment for In-door play

Equipment Available	*No. of ECE centres*
Sand	1
Paper	3
Colour	1
Beads	2
Clay	3
Water	1
Building Block	5
Toys	1
Puzzles	3
Card Boards	1
Picture with broken pieces	1
Seriation	1
Matching	1

Content and Methodology

The content and methodology was found child-centred and process-oriented. Activities like rhymes, action and asking questions to individual child were done in all the 10 ECE centres. In 9 institutions activities like singing, dancing and drawing were done; in 8 institutions activities like paper folding was performed; 5 institutions gave emphasis on mini sports; in 4 institutions children were asked to tell and narrate stories; 2 centres provided opportunity for clay modelling; and teachers had free talk with children in 2 institutions. Most of the ECE centres conducted activities organised at these centres.

Table 5: Child-centred and Process-oriented Activities

Activities	*No.of Institutions*
Paper folding	8
Singing	9
Story-telling by students	4
Dancing	9
Clay Modelling	2
Asking questions	10
Free talk	2
Conducting Debate	1
Drawing	9
Fancy Dress	1
Mini Sports	5
Computer Games	1
Narration	2
Mono-acting	1
Rhyme with Action	10

- 80% of ECE centres, conducted parent-teacher meeting to discuss about the child's progress in the class.
- Though the medium of instruction in all the institutions was English but Hindi, Oriya and Bengali were also used in different institutions.

Table 6: Daily Activities for Physical and Mental Development

Activities	*No.of Institutions*
Mass P.T.	1
Yoga	2
Puzzle	1
Jumping	1
Drilling	3
Questioning	2
Running	1
Playing	3
Dancing	1
Preparation of Craft-work	1
Simple exercise	2
Problem-solving activity	1
Aerobic	1
Meditation	1
G.K.	1

According to NCERT specification the activities for physical and mental development of children should be as per their age and developmental stage. In the study it was not found so, and activities were performed as per Table 6.

Activities for Parent-teacher Contact

It was found that out 10 ECE Centres 8 institutions conducted parent-teacher meeting; 4 institutions used to have formal talk with parents, in 3 institutions teachers used to maintain student diary, in 2 institutions counselling session was organised for parents and in other 2 institutions parents were contacted through phone

songs and rhymes; in 1 institution students were taught about different ways of greeting their elders and friends; and in 2 institutions simple reading was followed. However, no importance was given to role play activity at any of the ECE centre.

Reading Skill Development

Table 8 shows the strategies used for developing reading skills of kids:

Table 8

Strategies	*No. of Institutions*
Picture Reading	6
Sorting/Matching/Pairing	1
What is wrong	-
Letter Recognition	8
Developing Association	-

According to ECE curriculum, activities to be done in class for developing reading skill in children such as picture reading, sorting, matching, pairing of objects, finding what is wrong, letter recognition and development of associating abilities by providing various objects.

Development of Writing Skills

Table 9 shows various activities performed at ECE centres to develop eye-hand-coordination in kids.

According to NCERT, ECE curriculum activities like tracing and simple writing were emphasised only in two institutions. The coordination between eye and hand through tracing and simple writing lead to the development of writing skill. Various other activities as mentioned in Table 9 related to eye-hand-coordination were adopted in other ECE Centres.

Table 9

Activities related to develop eye-hand-coordination	*No. of Institutions*
Training	2
Writing	2
Colouring/drawing	9
Thumb/Vegetable printing	2
Puzzle solving	1
Finding odd man out	-
Making association	1
Block Building	2
Joining of dots	1
Paper tearing/folding	2
Stringing the beads	2
Catching balls	1

Development of Cognitive Skills

Simple comparison, copying different shapes, pair formation, identifying things, puzzle solving, explanation by teachers, chart/model showing were used at these ECE centres, 30% of ECE centres only gave, importance to explanation by teachers and simple comparison of objects. Teacher's responses were that for promoting cognitive skills. Activities like playing through educational aids, memory games, putting questions through stories, playing the game odd-man-out, puzzles, block building, manipulation of materials, nature-talk and walk and explaining by showing some materials, etc. were used at these centres.

Table 10

Activities	*No.of Institutions*
Painting	6
Print making	3
Tracing	1
Moulding	3
Craft	3
Group work	2
Building Blocks	2

For the development of creative thinking ability in children ECE curriculum gives importance to any type of activity which involves application of student's brain. The above mentioned practices were going on in 1 to 6 centres whereas rest 4 institutions were not doing anything for this.

Music and Dance

Songs/rhymes, imitating songs, playing on musical instruments, presentation of recorded music and dance were practiced in 7 to 10 institutions. It was useful for the development of coordination between thinking and action. According to ECE specification coordination between thinking and expressing that in action can be well-developed by providing practice in dance and music to children.

Development of Muscle Coordination

In this reference, in 1 school teacher participated in developing children's muscle coordination by encouraging children to play, in 7 schools simple exercises were demonstrated to children, in 1 school annual sports day was conducted, in 4 schools drill practice was used, in 2 schools the teacher herself played alongwith children, in another 2 schools dance practice was given, whereas in 1 school children were assisted by the teacher in various games. ECE specification (NCERT....) suggested that teachers in ECE centres should try to involve themselves more and more in classroom activities, which may enhance muscle coordination in children.

Other Findings

- Story-telling, Role play, Puppet show, Fancy Dress Competition and drama were used for expression of children's feeling into action. In order to allow students express their feeling without teaching different actions, single symbols were used.
- For imparting new information to children free talk, CDs, story-telling, Play-way-method, Presenting Picture and charts, drawing, tape-recorder Field trip, New Paper Reading and Book Reading by the teacher were used.
- Physical Development Programme was taken-up through Yoga, Laughing, Dancing, Playing rhymes.
- Health, Hygiene, Care and Nutrition Programme was done through toilet training, uniform checking, nail checking, hair checking, shoes checking and training for good manners, developing the habit of using handkerchief/napkins, inviting doctor at the centre for health checkup and developing the habit of brushing the nutritional problems in children and instruction on food habits and advising parents.
- Social and emotional development related activities included training

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Participation of Scheduled Castes Children at the Primary Stage in India

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Abstract

This paper discusses the participation of Scheduled Castes children at primary stage of school education in India according to Seventh All India School Education Survey (7th AISES). *Among Scheduled Castes children, girls participation is specially focused. Present status has been compared with past data to know the improvement in their participation and it is statistically analysed. This paper will provide the base for the assessment of the development of educational status of Scheduled Castes children at primary stage of education after* Sarva Shiksha Abhiyan (SSA) *as the commencement year of SSA programme and year of information collection under* Seventh All India School Education Survey *is same.*

Introduction

Education is the key factor for the social development. It plays very important role in making social status and social mobility. But a large section our population could not get opportunity to be a part of educated society due to various reasons. The section of scheduled castes is one of them. The expression Scheduled Castes was first coined by the Simon Commission and embodied in the Government of India Act of 1935. While these castes were listed systematically in the 1931 Census of India (Kambley (1982), pp. 31). Many great Indians like Mahatma Gandhi, Mahatma Fuley and Dr. Bhim Rao Ambedkar worked for the welfare of SC and they have given enormous contribution to bring them in main-stream of the society. After Independence, lots of efforts have been made by the Government of India and State governments to improve their social and economic status. Article 46 of the Constitution states that, "The State shall promote, with special care, the education and economic interests of the weaker sections of the people, and, in particular

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of the Scheduled Castes and Scheduled Tribes, and shall protect them from social injustice and all forms of social exploitation". Articles 330, 332, 335, 338 to 342 and the entire Fifth and Sixth Schedules of the Constitution deal with special provisions for implementation of the objectives set forth in Article 46 (GOI, 2005,v). These provisions need to be fully utilised for the benefit of these weaker sections in our society. Despite all these efforts it needs some more attention and efforts to bring them completely in the main-stream.

This paper is an effort to present status of participation of Scheduled Castes children at primary stage with consideration of schemes for the development of their education. For this purpose the data of the *Seventh All India School Education Survey* (7th AISES) (Reference Date: September 30, 2002) have been taken. To know the development in last decade, the data of the *Sixth All India Education Survey* (Reference Date: September 30, 1993) are considered.

Programme of Action (PoA), 1992

National Policy on Education, 1986 was modified in 1992 and a new Programme of Action (PoA, 1992) was prepared. As per PoA, 1992, following are the major initiatives to be taken for the educational development of Scheduled Castes. (GOI, 1992: 11-12)

- Incentives to indigent families to send their children to school regularly till they reach the age of 14;
- Pre-metric Scholarship scheme for children of families engaged in occupations such as scavenging, flaying and tanning to be made applicable from Class I onwards. All children of such families, regardless of incomes, will be covered by this scheme and time-bound programmes targetted on them will be undertaken.
- Constant micro-planning and verification to ensure that the enrolment, retention and successful completion of courses by SC students do not fall at any stage, and provision of remedial courses to improve their prospects for further education and employment.
- Recruitment of teachers from Scheduled Castes;
- Provision of facilities for SC students in students' hostels at district headquarters, according to a phased programme;
- Location of school building, *Balwadies* and Adult Educations centres in such a way as to facilitate full participation of the Scheduled Castes;
- The utilisation of *Jawahar Rozgar Yojana* resources so as to make substantial educational facilities available to Scheduled Castes; and
- Constant innovation in finding new methods to increase the participation of the Scheduled Castes in the educational process.

Special Provisions made by the Government

After independence, the Government of India has taken a number of steps to develop education level of SCs/ STs. National Policy on Education (1986) and

it's modification in 1992 have also stated measures to be taken as priority. In pursuant of NPE 1986 and the Programme of Action (1992), Government of India has incorporated some special provisions in the existing scheme (GOI, 2006-07). These are:

- Relaxed norms for opening of primary /middle schools; a primary school within 1 km walking distance from habitations of population up to 200 instead of habitations of up to 300 population.
- Abolition of tuition fee in all States in Government schools at least up to the upper primary level. In fact, most of the States have abolished tuition fees for SC/ST students up to the senior secondary level.
- Free textbooks, uniforms, stationery, schools bags, etc.
- The Constitutional (86th Amendment) Bill, notified on 13 December 2002, provides for free and compulsory elementary education as a Fundamental Right, for all children in the age group of 6-14 years.
- In addition to aforementioned steps, many other Programmes like *Sarva Shiksha Abhiyan* (SSA), District Primary Education Programme (DPEP), Janshala, Mahila Samakhya (MS), National Programme for Education of Girls at Elementary level (NPEGEL), *Shiksha Karmi* Project (SKP), etc. were launched by the government. All these programmes gave special attention to education of Scheduled Caste children.

Availability of Educational Facility at the Primary Stage in Habitations

According to the *Seventh All India School Education Survey*, there are 12,09,521 rural habitations with a population of 77,72,17,623. Out of total, 6,23,498 (51.55%) habitations are served by primary stage within the habitation, which cater 78.17% of the rural population of the country. As regards habitations served within a distance of one kilometer, it is observed that 10,35,764 (85.63%) habitations covering 94.17% population of the rural area, are served.

There are 1,74,700 habitations predominantly populated by the Scheduled Castes. Of these, 42.50% habitations, covering 68.05% of the population living in these habitations, have education facility at primary stage within the habitation and 86.07% habitations, covering 92.84% of the population living in the habitations predominantly populated by Scheduled Castes, have the facility within one kilometer.

If the availability of primary education facility in the habitations predominantly populated by Scheduled Castes is analysed in different population slabs, it observed that out of 22,739 habitations with population below 500, only 26.18% are served within the habitation and 81.71% habitations are having access to primary education within a distance of one kilometer. This indicates that 18% habitations do not have the facility of primary education within a distance of kilometer. It has been found that more than 95% habitations with population slabs 1000-1999,

2000-4999 and 5000 and above are served within one kilometer. Table 1 presents primary stage education facility in habitations predominantly populated by Scheduled Castes in different population slabs.

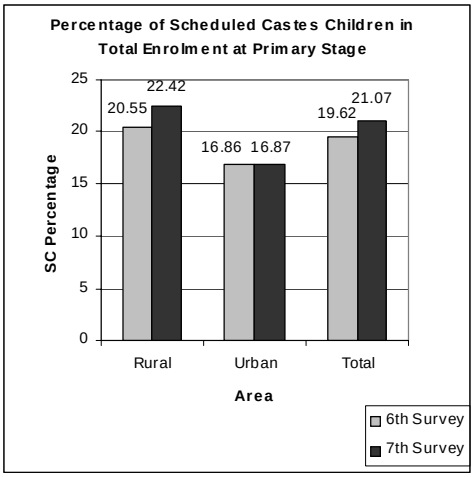
Enrolment of Scheduled Castes Children at Primary Stage

At primary stage 12,29,15,301 children are enrolled, out of which 46.82% are girls and 53.18% are boys. There is a difference of 6.36% in the enrolment of girls and boys at national level. Rural and urban areas have 46.73% and 47.10% girls enrolment respectively. Enrolment of scheduled castes children at primary stage is 2,59,03,832, which constitutes 21.07 percentage of the total enrolment. Percentage of scheduled castes children against total enrolment of rural area is 22.42 where as this percentage in urban area is 16.87, which show that in rural area SC has bigger share as compared to the urban area. In rural area, total enrolment of scheduled castes children is 2,08,74,716. In this enrolment, 46.53 per cent are girls and 53.47 per cent boys. It shows that SC girls enrolment percentage is almost same as overall girls percentage. This is an achievement of the efforts made by central government, state governments and various non-government organisations working for the education of the scheduled castes children. In urban area, 50,29,116 scheduled castes children are enrolled in which 47.35% are girls and 52.65% boys. It is observed that in urban area girls percentage of SC children is little bit higher than overall girls percentage in urban area. Over all girls enrolment percentage of SC is 46.69.

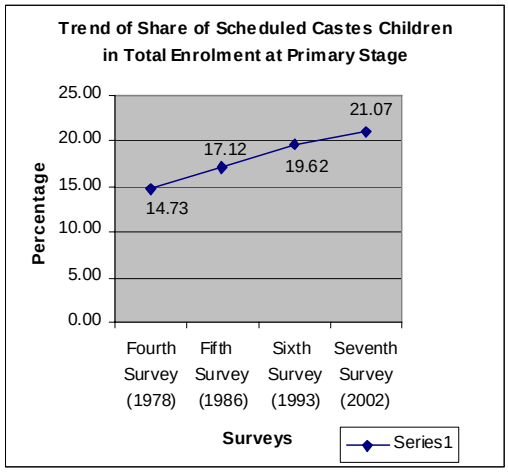
According to the 6th All India Educational Survey (1999), 1,90,35,297 scheduled castes children were enrolled which was 19.62% of the total enrolment. This has gone up to 21.07% in the 7th AISES i.e. share of SC children has increased by 1.45% in comparison to the 6th Survey. Girls enrolment percentage in scheduled castes children was 41.66% in the 6th survey which has gone up to 46.69%. Hence, in comparison to the 6th Survey, SC girls enrolment percentage has increased by 5.03%. SC girls enrolment percentage has increased by 6.06% and 1.38% in rural and urban areas respectively. Table 2 compares the enrolment of scheduled castes children in the 6th and 7th surveys.

From Table 2 it is observed that SC girls percentage has increased significantly in rural, urban and overall areas. In comparison to the 6th survey the enrolment of scheduled castes children has gone up by 36.08 in the 7th survey. In rural and urban areas this growth has been 40.14% and 21.49% respectively.

Picture 1 depicts the increase of SC children enrolment percentage in total enrolment rural, urban and overall areas in the 7th Survey as compared to the 6th Survey. It is to be noted that there is gain of only 0.01% in urban area. This picture shows a gain of 1.87% in rural area and 1.45% is overall. Picture 2 depicts the trend of share of scheduled castes children. From this picture it is clear that in the Fourth Survey (1978), SC percentage was only 14.73, which has reached up to 21.07% in the Seventh Survey (2002).



Picture 1



Picture 2

Managementwise Position

In Primary schools, total enrolment is 8,09,00,653 out of which 47.38% are girls and 52.62% boys. In total enrolment, 53.55% are enrolled in government schools, 30.69% in local body schools, 5.75% in private aided schools and 10.01% in private unaided schools. It is observed that out of total enrolment of scheduled castes children in primary schools, 56.51% are in government schools, 31.99 % in local body schools, 4.73% in private aided schools and 6.77% in private unaided schools. It is also clear from Table 3 that in rural, urban and overall area the maximum percentage of enrolment of SC children is in government schools. In Table 3 managementwise distribution of scheduled castes children enrolled in primary schools is given.

Participation of Scheduled castes children in Different States

Table 4 shows statewise position of SC population percentage, SC enrolment percentage and percentage of girls in SC enrolment at primary stage in rural, urban and overall areas in India.

It is observed that Punjab has maximum SC population percentage 28.85 where as Lakshdweep, Nagaland and A & N Islands have minimum zero per cent. National SC population percentage is 16.20. Twenty-two States/ Union Territories are below this national figure whereas 12 states/union territories are above it. Karnataka is equal to national figure. Punjab has maximum percentage of SC enrolment, which is 48.09% and A & N Islands minimum zero per cent. Out of total enrolment at primary stage, national

SC enrolment percentage is 21.07. There are 28 States/Union Territories below this figure and only 7 States/Union Territories above it. In rural and urban areas national SC girls percentage are 46.53 and 47.35 respectively. In rural area, Lakshdweep has maximum SC girls percentage which is 100 and minimum zero in A & N Islands. There are 23 States/Union Territories have SC girls percentage above the national percentage in rural area and remaining 12 States/Union Territories below it. In urban area, maximum SC girls percentage is 54.57 of Sikkim and minimum zero per cent of Lakshdweep and A & N Islands. Nineteen States/ Union Territories are above the national percentage of SC girls whereas sixteen States/Union Territories are below the national percentage. Considering the overall area, the national percentage of SC girls is 46.69, which is approximately equal to that of rural area. In rural area, twenty-three States/Union Territories are above the national percentage of SC girls and twelve States/Union Territories are below it.

Conclusions

- More than 95% of all habitations predominantly populated by Scheduled Castes with population slabs 1000–1999, 2000–4999 and 5000 and above are served by primary stage within a distance of one kilometer.
- Around 19% of all habitations which are predominantly populated by Scheduled Castes with population slab below 500 are still unserved within a distance of one kilometer.
- In the period of 24 years (1978-2002), that is the period between fourth survey and seventh survey, there has been a remarkable improvement in participation of SC children at primary stage as their share in total enrolment has gone up to 21.07 from 14.73.
- The percentage of SC girls in rural and urban area is almost same as overall percentage of girls in respective areas.
- During the intervening period between 6th survey and 7th survey, the increase of 36.08% in the enrolment of SC children has been recorded which tells success story of the different schemes/ programmes launched for the development of education of scheduled castes children.
- Some States namely, Bihar (38.80%), Jharkhand (41.63%) and Rajasthan (44.42%) have SC girls percentage below 45% in rural area. So, these states need special efforts to bring SC girls to school.

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Table 1: Primary Stage Education Facility in Habitation Predominantly Populated by Scheduled Castes

Distance Category	*Item*	*Item Population Slabs*								
		5000 above	*2000–4999*	*1000–1999*	*500–999*	*300–499*	*100–299*	*Below 100*	*Below 300*	*Total*
1	2	3	4	5	6	7	8	9	10	11
Within Habitation	A	606	5056	14830	24013	15061	12781	1897	14678	74244
	B	4625373	13891157	19931918	17028192	5892452	2578566	121129	2699695	64068787
	C	94.25	92.23	83.58	64.45	43.96	22.66	8.28	18.51	42.50
	D	95.22	92.77	84.45	66.00	45.06	24.48	9.24	22.79	68.05
Within a Distance of 1 km.	A	634	5389	17123	34424	30044	46003	16750	62753	150367
	B	4799068	14731967	22814530	23930416	11499982	8653193	979524	9632717	87408680
	C	98.60	98.30	96.50	92.40	87.70	81.55	73.12	79.12	86.07
	D	98.80	98.39	96.66	92.76	87.95	82.15	74.70	81.33	92.84
More Than 1 Km.	A	9	93	621	2832	4215	10405	6158	16563	24333
	B	58490	241323	787968	1869005	1575747	1879821	331682	2211503	6744036
	C	1.40	1.70	3.50	7.60	12.30	18.45	26.88	20.88	13.93
	D	1.20	1.61	3.34	7.24	12.05	17.85	25.30	18.67	7.16
Total No. of Habitations		643	5482	17744	37256	34259	56408	22908	79316	174700
Total Population		4857558	14973290	23602498	25799421	13075729	10533014	1311206	11844220	94152716

Note: A- Number of Habitations; B Total population; C- Percentage of Habitations served.
D-` Percentage of Population served

Table 2: Comparison of Scheduled Castes Enrolment in the 6th and 7th Surveys

Area	6th Survey Girls	7th Survey Total	Girls %	Girls	Total	Girls %	Growth in Girls Percentage
Rural	60,27,912	1,48,95,737	40.47	97,12,770	2,08,74,716	46.53	6.06
Urban	19,02,761	41,39,560	45.97	23,81,061	50,29,116	47.35	1.38
Total	79,30,673	1,90,35,297	41.66	1,20,93,831	2,59,03,832	46.69	5.03

Table 3: Management wise Percentage of Children Enrolled in Primary Schools

Management	*Rural*		*Urban*		*Total*	
	All	*SC*	*All*	*SC*	*All*	*SC*
Government	59.13	60.03	28.33	36.92	53.55	56.51
Local Body	31.70	32.69	26.13	28.10	30.69	31.99
Private Aided	3.33	2.98	16.66	14.48	5.75	4.73
Private Unaided	5.83	4.30	28.89	20.49	10.01	6.77

Table 4: Statewise SC Population Percentage, Enrolment Percentage and Girls Enrolment Percentage at Primary Stage

Sl. No.	*State/Uts*	*SC Population Population in Total Population*	*SC Enrolment Percentage in Total Enrolment*	*SC Girls Percentage*		
				Rural	*Urban*	*Total*
1	Andhra Pradesh	16.19	19.93	49.18	49.34	49.21
2	Arunachal Pradesh	0.56	1.05	46.07	39.95	44.56
3	Assam	6.85	10.6	47.48	47.96	47.56
4	Bihar	15.72	17.09	38.35	45.9	38.8
5	Chhattisgarh	11.61	14.69	47.83	48.79	48.01
6	Goa	1.77	2.52	50.06	46.74	47.77
7	Gujarat	7.09	8.14	47.01	49.46	46.79
8	Haryana	19.35	26.51	46.52	49.37	47.01
9	Himachal Pradesh	24.72	29.21	48.70	46.72	48.59
10	Jammu & Kashmir	7.59	9.16	46.09	45.87	46.05
11	Jharkhand	11.84	13.41	40.68	47.11	41.63
12	Karnataka	16.2	19.99	48.36	48.20	48.32
13	Kerala	9.81	10.35	48.27	49.43	48.49
14	Madhya Pradesh	15.17	18.37	46.02	46.84	46.24
15	Maharashtra	10.2	14.44	48.33	48.20	48.19
16	Manipur	2.77	3.28	45.46	49.83	47.99
17	Meghalaya	0.48	1.85	48.03	54.52	51.27
18	Mizoram	0.03	0.65	34.78	46.06	45.76
19	Nagaland	0.00	2.78	45.87	46.14	46.05
20	Orissa	16.53	20.4	47.17	48.29	47.28
21	Punjab	28.85	48.09	47.61	49.21	47.9
22	Rajasthan	17.16	20.34	44.10	45.72	44.42
23	Sikkim	5.02	7.13	49.90	54.57	50.18
24	Tamil Nadu	19.00	25.54	48.65	48.41	48.56
25	Tripura	17.37	19.47	48.72	48.3	48.65
26	Uttar Pradesh	21.15	30.69	46.57	45.05	46.38
27	Uttarakhand	17.87	25.04	49.23	47.97	49.02
28	West Bengal	23.02	28.42	48.51	48.94	48.56
29	A &N Islands	0.00	0.00	0.00	0.00	0.00
30	Chandigarh	17.5	17.2	44.4	47.13	46.56
31	D & N Haveli	1.86	1.96	47.7	47.75	47.72
32	Daman & Diu	3.06	3.95	50.68	46.84	48.6
33	Delhi	16.92	13.28	48.07	45.11	45.32
34	Lakshdweep	0.00	0.03	100.00	0.00	50.00
35	Pondicherry	16.19	18.2	48.43	49.4	48.84
	INDIA	16.20	21.07	46.53	47.35	46.69

Strengthening the role of State in School Education vis-à-vis the Private Initiative

PH. NEWTON SINGH*

Abstract

The paper pleads for a strong and a more pro-active role of the State in view of the growth of the private schools especially in primary education sector. Most of the private schools, as many of the findings confirm, mostly cater education for the children of the wealthy families. In a developing country like India where illiteracy rate and also the never-enrolled rate is relatively high, giving a free hand to private players to deliver a primary public good like education will not portend well for the country. Moreover, fulfillment of the much desired objective of universal elementary education would remain a distant dream if the state withdraws itself from its responsibility and allows the government school system to deteriorate further till it dies a silent death.

A recent instance of a child being denied admission in one of the 'elite public schools' in Delhi despite meeting the required percentage of mark has exposed the myths associated with these schools. The only reason that deprives the child her otherwise deserved admission is her poor family and social background, which the school administration thinks does not meet the eligibility criteria set for these schools. There are such similar instances happening in these so-called elite public schools. It is in fact paradoxical with the term 'public' when these schools are in fact serving only a few section of the society. In fact, private school system today has become more of an agency of social and class reproduction than the transmitters of knowledge and values. Cultural capital, comparable to economic capital, is transmitted by inheritance and invested in order to be cultivated. And through the new type of private schools emerging, the existing social and class divide tend to perpetuate further, creating a new form of cultural capital exclusively for a few section of the population. This reproduction of social and class divide is less a result of direct reproduction based on inherited wealth and incomes, and has more to do with the mediated

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patterns, for example, access to well-paid employment. This would be true if we see the portrayal of private schools as markers of excellence or merit and also the alleged higher market value of the persons with private schools background.

Private schools have now almost reached a proportion we can no longer afford to ignore. They have grown up so rapidly to become a kind of substitute for, rather than supplement to government schools. This could be attributed to many factors among which the deteriorating condition of the government schooling system and parental demand of a differentiated kind of education are important. However, the promotion and expansion of private sector may further accentuate existing social divisions and reduce commitment towards quality improvement in government schools. Further, what is significant as Vimala Ramachnadran (2004) argues is that, the growth of new private schools 'is giving rise to a new trends of hierarchies of access, whereby paradoxically, the democratisation of access to schools seems to be accompanied by a child's caste, community and gender in defining which school she or he attends'. Andre Beteille also argues that the "family among middle class and upper middle class Indians is changing its orientation away from lineage, sub-caste and caste to schools, college and office they attend to'*.

Furthermore, the private phenomenon in school education has also posed serious questions on the policy implications on the part of the State. What if the government remains a silent spectator while at the same time allowing its own system to wither? What are the consequences on the issue of equity if the private schools overhaul the government school system and what should be the response from the state? The subsequent sections of the study would seek to understand some of these issues pertaining to private schools vis-à-vis government schools.

Tracing the Genesis of Private Phenomenon

Children's education in the beginning was a matter of family, the kinship group or the local community. In several countries, education became a task for religious institutions, and during the nineteenth century only, the State made education a public responsibility. Education was until then private in the sense that it did not belong to the State; it was decentralised and national curricula were very rare (Mallison, 1980).

The private initiatives in education in India could be traced in the ancient and medieval period in various forms such as the Ashram schools, Gurukuls, *Pathsalas* and *Madrasas* which catered education to small section of the society. In ancient India, almost all schooling was conducted by religious bodies or by tutors employed on an individual basis by families with sufficient means. In fact the view that government has responsible for education of their citizens has been widely held only since the 19th century in Europe and since the early 20th century in most other parts of the world

* Quoted in Anne Waldrop, *The meaning of the Old School-Tie: Private Schools, Admission Procedures and Class Segmentation in New Delhi*, pp.203-27.

(Bray, 1998). Before that we had religious institutions directly engaging in the sphere of education. This is in the process of secularisation that religious control over education and educational institutions was challenged and the state became a public provider of education.

However, the modern fee-paying private schools in India owe their origin to the Wood's Dispatch of 1854 (Tilak, 1990) which made elaborate provisions for grants-in-aid to private schools. Under the provisions of the Dispatch, educational institutions were allowed to run privately for profit. By this provision for grants-in-aid for the private schools was not only able to reduce financial burden on the public treasury, but also could introduce elitist character into the educational system providing education of the kind the upper classes desired for their off-springs, without a large expenditure by the government. This is in fact a reflection of a capitalist ideology where the role of the state is greatly reduced. The present system of private school unfortunately, is a continuation of this system.

Defining private schools is also a painstaking exercise. There are various types of schools under the nomenclature of private. The private schools are not a homogenous lot. There are different types of private schools in the country but are generally clubbed together and are labeled as private schools. The private sector includes actors with varying motivations, resources and the ranges extend from voluntary organisations, missionary schools and schools founded on philanthropic venture to clearly commercials set ups. It is important here to mention that some of the schools are established and even registered under the commercial establishment and shops act (Panchamukhi, 1989). Even among the private schools there is a broad classification of private schools as private aided and non-aided or self-financing schools. The present study shall primary focus on the private unaided schools which are either formally recognised to transact educational business or not necessarily recognised.

It is pertinent here to mention that the Constitution of India allows establishment of private schools irrespective of whether they are or are not recognised and aided by the State (Anuradha De, 2002). Article 30 of the Indian Constitution also clearly mentions the Right of Minorities to establish and administer educational institutions. Private schools thus, have a legal and constitutional sanction to establish and operate in India.

However, the major concern is the pace of the growth of the private schools which if not checked could overthrow the government schools. Placing such a large stake as education on private sectors cannot be a good proposition. Moreover, in a country like India where the dropout rate and the never-enrolled students is still high, the State has also to play a more pro-active role. It is in this context that the Constitution 93rd Amendment, 1992 has placed a stronger view of the State by making elementary education a Fundamental Right by inserting Article 21 (A) stating that, the State 'shall provide free and compulsory education to all children of the age of 6 to 14 years in such as the State may by law determine'.

Making elementary education a fundamental right by this amendment has reinforced the role of the State in achieving the goal of free, universal elementary education as envisaged in the Directive Principles of State Policy. The increasing responsibility entrusted by the Act on the one hand and the increasing growth of private schools on the other, pose a question on the role and the credibility of both the State and the private actors.

Understanding Private Schools: A Sociological Perspective

Education, like health is primarily a public good. The public good ethos is linked to socio-democratic ideals of opportunities and access for many. Since the fundamental assumption that education would help erode the socially inherited structural inequities and provide opportunities for social advancement through equity of access and opportunity, it would continue to be regarded as public good (Levin, 1987). And in a country like India where majority of the population is below poverty line and belong to the lower income strata and also where educational achievement compares still low with other developed countries of the world, education should not be limited by financial considerations.

While analysing private schools in education, it would be appropriate to take into account the available evidence about locational distribution, social reach by looking into the class and social composition of these schools to assess the nature of clients of private schools. The general assumption is that the private schools cater education mostly to the children of higher income strata and generally the elite class in the society. It is also found that private schools are concentrated mostly in the urban areas. However, their spread has now even penetrated in the rural areas also. Gender bias is also witnessed though less pronounced, taking into consideration the income level of the families. For example, parents unable to afford sending both their children to private schools will prefer their male ward to be sent to the private school. If these assumptions of the private school hold true, and as some of the findings even show and if they remain an exclusive domain of a few children of the affluent families, then it will do more harm than good in education and achievement of universal elementary education will remain an illusion.

Anuradha De *et at.* (2002) findings on the percentage distribution of the primary and upper primary students from two polar groups in 1993 reveal two different worlds of education if we take into consideration two extreme cases of rural, female SC/ST students of India and urban, male forward caste students of the same country. Only about 2 per cent in the primary and 5 per cent in the upper primary students of the former category are taught in the private unaided schools. And the evidence that private school enrolment is biased towards males is more straightforward.

Dreze and Gazder (1996) in their study in Uttar Pradesh also reveal that school attendance in private schools is 'significantly male dominated as parents are more willing to pay for male children'. This could be attributed to parents' more willingness to permit a male child to

travel the location where private schools are established. Implicit in it is that these private schools are located far from the rural areas. Tilak and Sudarshan (2000) study also reports similar findings. While examining the trend in private enrolment they report that nearly a half of the growth in enrolment in urban areas and a sixth of the growth in rural areas of India were accounted for by the private unaided schools between 1986 and 1993. They also find biases favouring urban, male and non-scheduled caste and tribes. What explains these biases then? The higher cost of sending children to private schools and in-affordability of the parents could be one. The private institutions, according to Tilak (1990) practice exclusiveness through charging high tuition fees and alarmingly large capitation fees or donations and through selection of children on the basis of intellectual aptitude defined by the parental and familial background. Another factor that explains the locational bias could be the concentration of more affluent parents in urban than the rural areas and hence the larger concentration of these schools in these areas.

Based on their findings, they conclude that private schools may aggravate the already existing inequalities along lines of gender and caste. Looking at the considerable biases in the clientele of private schools, Anuradha De *et al.* also conclude that 'private schools are more for boys, for upper caste, and for urban areas than government schools, and also attending these schools has become a mark of social privilege'.

Are Private Schools Really Better than the Government Schools?

A true comparison between private schools and the government schools is crucial. In terms of infrastructure, teaching methods, pupils' achievement and teacher competence, the private schools are better than the government schools. Many of the studies report the same. However, the PROBE Data differs in terms of teacher competency. It says that teaching skills for primary level children were not superior to those found among the government school teachers.

However, these perceived advantages of private schools in education may be attributed to many factors. The parents and students' cultural capital very much influence the client composition of the private schools. There are differences between the students when they enroll in private and government schools respectively. Those students opting for private schools have higher motivation and more cultural capital and privileged parents choose these schools over the government schools. The client homogeneity of the private schools, its consideration for profit which ensures managerial efficiency and the element of monopoly rent which its products enjoy due to its small share in the market are the major factors which put private schools above the government schools in their comparison (Varghese, 1993).

However, Tilak (1990) gives a scathing critique of the private schools, terming the so-called of excellence of the private schools as myth. He argues that the quality of private schools is not necessarily superior. Not only are private schools inferior in quality, they also

contribute to the decline in the quality of public institutions and thus to the deterioration on the overall quality of education. He sees profit as sole motive behind the mushrooming private schools. This is the result why they grow more in cosmopolitan urban areas than the rural areas, 'to satisfy the needs of the gullible parents'. And some of the state governments support their expansion as long as they serve the vested interest. This, he thinks would jeopardise the objective of equal opportunities for education and the overall effect would be to convert education into a force for reinforcing the existing stratification of the society.

Renewing State's Legitimacy

The new legislation after the 93rd Amendment making elementary education a Fundamental Right has imposed a strong obligation on the state to play a pro-active in providing education. It is also true that with the increased demand of education, the state cannot be the sole provider of education in India. There are both theoretical and practical limitations. Taking into account the limitations of the state, the Tenth Five-Year Plan also suggests a synergetic partnership between the private and the government sectors in achieving universal elementary education.

However, the recent surge in the growth of private schools especially as a result of the falling quality of the government schools seems to have changed the equation between the government and the private schools. If the private schools become an alternative to government schools and become a dominating feature in education, it could lead to decay of educational standards besides class conflict in the country (Ruhela, 1993). In this context the State has to renew its legitimacy as public authority in education. The existing government schools need to be improved and new curriculum introduced so as to counter the private schools. The schools need to be equipped with proper infrastructures and learning materials. And most importantly, there should emerge a proper mechanism to regulate the existing private schools. Until now, state has not been doing much to regulate these schools and many of them spring up in many states even without the government's knowledge.

The absence of regulation has also facilitated the growth of these schools, creating a dual system of education with the government schools deteriorating further. Therefore, giving private players a free hand especially in areas of public good like education will not be a healthy development. The case of Himachal Pradesh's success story in transforming a mass illiteracy to near universal primary education almost entirely with the government schools with relatively little contribution from private institutions during a short time could be replicated in other states.

Moreover, unless the effectiveness of the government school system improves, there are little prospects of universalisation of elementary education in India by 2010 as promised in the Constitution of India. The experience of the now industrialised countries demonstrates that while private sector could play supportive role, it is the state which plays a more dominant role. The

Indian state will need to be much more pro-active in reforming the public school system. At the same time, the quality of schooling in the private sector could improve of the state were to take a more pro-active regulatory role. The Kothari Commission (1964-66) also stated that 'the growing educational needs of a modernising society can only be met by the State and it would be a mistake to show any over-dependence on private enterprises which is basically uncertain'. This concern also finds echoed in the overwhelming message emanating from the District Primary Education Programmes (DPEP) schools that the presence of a good quality government school, which functions regularly, can indeed surmount many obstacles of the prevalent social and economic barriers to schooling. As Vimala Ramachandran (2004) rightly says 'special strategies are also necessary to reach out elementary education to the people who not only belong to the most deprived sub-groups of scheduled castes and tribes but are also the people with almost no voice in the society'. This can be fulfilled only when there is a strong state, supplemented by the private players.

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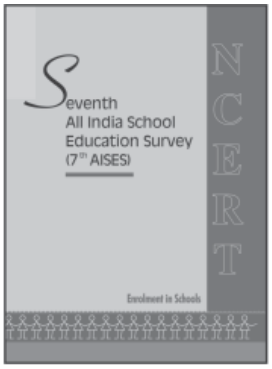

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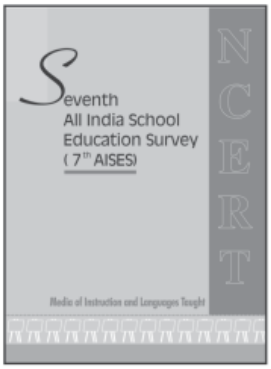

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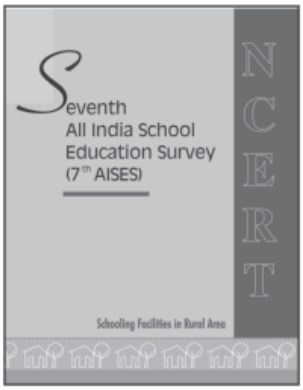

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