

ISSN 0377-0435 (Print)
0972-5628 (Online)

Journal of Indian Education

Volume XLII

Number 2

August 2016

JOURNAL

विद्यया ऽ मृतमश्नुते



एन सी ई आर टी
NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

GUIDELINES FOR CONTRIBUTORS

Original manuscripts of the articles must be sent in English, typed in Times New Roman - 12pt., double space, on one side of A-4 paper with sufficient margins, to

The Academic Editor
Journal of Indian Education
Department of Teacher Education, NCERT
Sri Aurobindo Marg, New Delhi 110016
E-mail: dtee1999@rediffmail.com

The articles must be submitted in both soft (CD or E-mail) and hard copy format.

An abstract of the paper in not more than 150 words must be sent with each manuscript.

Diagram or line drawings must be supplied separately, numbered neatly for identification and their position in the text clearly indicated. Tables may be given as part of the text.

References need to be listed at the end of the article, in alphabetical order, as follow:

LANNIER, J. AND J. LITTLE. 1986. Research on teacher education. In M. WITTRUCK (Ed.), *Handbook of Research on Teaching*. 3rd ed. Macmillan, New York.

NARAYAN, JAYANTHI AND M. AJIT. 1991. Development of skills in a mentally retarded child: The effect of home training, *Indian Educational Review*. Vol. 28. No. 3. pp. 29-41.

ISSN 0377-0435 (Print)
0972-5628 (Online)

विद्यया ऽ मृतमश्नुते



एन सी ई आर टी
NCERT

JOURNAL OF INDIAN EDUCATION

Volume XLII

Number 2

August 2016

CONTENTS

EDITOR'S NOTE	3
Humanistic Approach to Education G. KOTESWARAIAH AND M. BASAVANNA	5
Understanding Philosophical Orientations of Paulo Freire SONIKA CHAUHAN	13
Colonial Codification of Education in India until 1920 PREETI	29
Challenges and Responsibilities in Teaching in Emerging India MANI SINGH, CHANDAN K. SINGH, AND P.K. SINGH	45
Conflict and Education Mapping the Field in Literature? HABIBULLAH SHAH	61
Impact of Socio-economic Status on Language Learning Motivation of Secondary School Students RAJNI SINGH AND SANJIV KUMAR CHOUDHARY	79
Punctuation and the Sanskrit Language JATINDRA MOHAN MISHRA	91
Outcome-based Education and Constructivism Synergy Challenges and Possibilities C.G. VENKATESHA MURTHY	98

Study of Examination and Achievement as Dimension of Psychological Stress among Science Students NARENDRA KUMAR AND RAJIVE KUMAR	111
Tactile Map Book for Students with Visual Impairments A Step towards Inclusive Education in India APARNA PANDEY	120
Some Transactional Aspects of School Internship in Diploma in Elementary Education Course in India VIPIN KUMAR CHAUHAN	129
Newly Appointed CRCCs in Koraput District of Odisha Perceptions, Problems and Promises MANORANJAN PRADHAN AND CHANDRAKALA BAGARTI	138

EDITOR'S NOTE

Humanistic approach, on which humanistic education is based, emphasises the importance of the inner world of the learner and places the individual's thoughts, feelings and emotions at the forefront of all human development. Humanistic education appears to be related to concern for personal development, self-acceptance, and acceptance by others, to put differently, making students more and more human. Humanistic education is therefore interested in educating the whole person — the intellectual and also the emotional dimensions. G. Koteswaraiah and M. Basavanna reflect on the views of Carl Rogers, an American psychologist and renowned counsellor on humanistic approach to education. The authors are of the view that Rogers' ideas that (i) students should be treated with respect by their teachers, (ii) there should be interaction among students, and teachers, and (iii) teachers should encourage students to nurture their creativity, are universally accepted.

Paulo Freire is known as a renowned educational philosopher. His philosophy of education evolved from his own educational experiments and its main thesis of involving the totality of the child in the process of education. In his famous book, *Pedagogy of the Oppressed*, he has presented stimulating exposition of the phenomenon of oppression in our education system and society, and the ways in which this oppressing action can be reversed. Sonika Chauhan, through her paper, explores Freire's educational philosophy and the core concepts of his political-educational theory.

India had a well-developed and widespread system of indigenous education during pre-colonial period which continued till 1813 when British tried to introduce a new system of education. Preeti in her article traces the nature of education during colonial period until 1920, especially in the area of natural and social science, women's education, science, medicine and technical education.

It goes without saying that the teachers are critical to the success of our endeavours to impart quality education to our children. Teaching has been considered a noble profession in our country. However, this profession faces many challenges which need to be addressed. Mani Singh, Chandan K. Singh and P.K. Singh reflect on the key challenges of teaching profession in the present context. The paper also talks about some macro and micro-level interventions to address these challenges.

Nowadays, conflict has become a global problem which affects every aspect of human life, including education. Habibullah Shah discusses how literature has reflected on the relationship between education and conflict. The paper also discusses how conflict can have positive impact on education.

Many social factors affect the learning of English as a second language in our country. Rajni Singh and Sanjiv Kumar Choudhary in their paper examine the influence of socio-economic status on students' English language learning motivation.

Sanskrit is known as a classical language of the country. It is also one of the 22 official languages of India. Jatindra Mohan Mishra explains how punctuation is used in Sanskrit language.

Outcome-based education has been adopted around the world, at different levels. Recently, Government of India directed to prepare learning outcomes for all school subjects at all levels for children. C.G. Venkatesha Murthy discusses the parameters of outcome-based education, especially in the context of constructivist setting.

Narendra Kumar and Rajive Kumar conclude in their research paper that examination and achievements are major factors for causing stress among science students at senior secondary level.

Geography is an integral component of social science up to secondary level for all children. Teaching geography for blind or partially sighted children is a challenging task. Aparna Pandey's paper makes us aware about a tactile map book prepared by NCERT to facilitate learning of geography by visually challenged students.

Two papers are related with teacher education. The status of school internship component of Diploma in Elementary Education course *vis-à-vis* its objective is reflected in Vipin Kumar Chauhan's paper, whereas Manoranjan Pradhan and Chandrakala Bagarti highlight vision of teacher educators working at cluster level centres in a district of Odisha about school education.

Academic Editor

Humanistic Approach to Education

G. KOTESWARAIAH* AND M. BASAVANNA**

Abstract

The chief proponent of humanistic viewpoint in education was Carl Rogers, an American psychologist, personality theorist and a renowned counsellor. His views on learning and teaching may be seen as an extension of his theory of psychotherapy. If his theory is client-centred, his theory of learning is student-centred. According to Rogers, today educational practices at all levels are basically authoritarian and coercive; teachers are perceived as possessors of knowledge, and students as its passive recipients; educational settings are typically impersonal, with greater emphasis on acquiring cognitive skills than on developing affective skills. Contemporary education does not teach us how to live with others in cordial relationships. Learning espoused by Rogers is significant or experiential learning; it gives equal emphasis to cognition as well as feeling. If experiential learning is to transpire, then a personal relationship between the teacher and the learner must exist. Certain attitudinal qualities such as (a) realness or genuineness in the teacher, (b) prizing, acceptance, trust, and (c) empathetic understanding, are crucial to such relationship. The teacher is seen as facilitator of learning and the goal of education is to make the students healthy and fully functioning persons.

INTRODUCTION

The chief proponent of humanistic viewpoint in education was Carl

Rogers, an American psychologist, personality theorist and a renowned counsellor. He was one of the founders

* Reader in Psychology, Govt. College for Men, Kadapa-516004, Andhra Pradesh.

** Professor of Psychology (Retd), S.V. University, Tirupati-517002, Andhra Pradesh.

of the humanistic psychology, which is often referred to as the 'third force' in psychology, the other two being psychoanalysis and behaviourism. According to psychoanalysis, man is basically biological being, an animal; he has evolved from the animal ancestry and shares with it several basic proclivities; at the most, he is a domesticated animal; the goal of education is to socialise him, domesticate him and make him fit to live as a member of society. According to behaviourism, man is a sophisticated machine, at the best, he is a super computer; education must provide required software to regulate his behaviour. But, according to humanistic psychologists, man is more than an animal; he has special characteristics that are not found in animals; he is not a machine, he is the creator of the machines; it is unfair to equate the creator of the machine with his creation, the machine. He is a human being endowed with special qualities that are not shared by animals or machines. Education should try to help him to become what he can become, to realise his potentialities, and to reach the maximum development.

The term 'humanistic psychology' was coined by Abraham Maslow to describe a position that focuses on the creative potentialities inherent in human beings, and that seeks ways to help them realise their highest and most important goals. Nearly all of the humanistic theories postulate the existence of an innate growth

mechanism within individuals that will move them towards realisation of their potentialities if right kind of environmental conditions exist.

This growth process has been variously named by its proponents as the drive towards self-actualisation, self-realisation, or self-hood. Humanistic psychologists advocate that this growth process must be allowed to express and the right environment is to be created for this purpose. They believe that proper education can do this to some extent.

Rogers was basically a psychotherapist and the founder of a form of counselling called client-centred therapy, the most widely known and practised technique of counselling all over the world. His interest in learning and teaching developed during his later years, especially with the publication of his book, *Freedom to Learn* (Rogers, 1969). His views on learning and teaching may be seen as an extension of his theory of psychotherapy. If his theory is client-centred, his theory of learning is student-centred or person-centred. His theory of learning is predicated on the hypothesis: "If I can provide a certain type of relationship, the other person will discover within himself the capacity to use that relationship for growth and change, and personal development will occur."

According to Rogers, today educational practices at all levels are basically authoritarian and coercive; teachers are perceived as possessors of knowledge and students as its

passive recipients; education is merely the process of transmitting information from teachers to students; educational settings are typically impersonal, with too much emphasis on performance and its evaluation through examination; too little attention is devoted to issues of importance. There is greater emphasis on acquiring of cognitive skills than on developing affective skills. Learning espoused by Rogers is significant or experiential learning; it gives equal weight to cognition (knowledge) as well as feeling.

CHARACTERISTICS OF SIGNIFICANT OR EXPERIENTIAL LEARNING

For Rogers, learning must be meaningful, significant and experiential. It must be relevant to the individual's needs and bring about substantial change in her/his behaviour and experience. The defining characteristics of such learning are:

1. It has a quality of personal involvement: the whole person — both feeling and cognitive aspects — is involved in the learning process.
2. It is self-initiated: although the stimulus comes from outside, the comprehension, the grasping comes from within.
3. It is pervasive: it makes a difference in the learner's behaviour and experience — his attitudes, opinions and even the personality of the learner.

4. It is self-evaluated: the locus of evaluation resides in the learner, not in an external criterion.
5. Its essence is meaning: when learning occurs, the elements of meaning is built into the whole experience.

POSTULATES OF ROGERS' LEARNING THEORY

Rogers' theory is predicated on permitting the learner to be free to engage in self-initiated, self-reliant learning that is motivated by a self-actualisation tendency. The instructor's role is that of a facilitator who helps the learner to actualise all potentialities. Rogers' views can be summarised in terms of the following postulates:

1. There is an innate potentiality for learning. This potentiality and desire for learning can be realised under suitable conditions. The teacher, as a facilitator of learning, must work around the individual's natural desire to learn.
2. Significant learning occurs under conditions in which the material to be learned is perceived by learners as significant and relevant to their own purposes. Under such circumstances, learning occurs speedily.
3. Learning that is threatening to self-organisation is resisted. When the external threat is minimal, assimilation of learning is facilitated. Learning proceeds

smoothly under conditions of low threat to self.

4. Learning is more effective when one is placed in experiential confrontation with everyday problems. Learning by doing is among the most effective techniques of promoting learning.
5. Self-initiated learning is the most lasting and pervasive. It involves the whole person — feelings as well as intellect.
6. Learning is easily facilitated when the learner actively and responsibly participates in the learning process. Passive learning is less effective than active, participative learning.
7. The facilitation of independence, creativity and self-reliance is possible through self-criticism and self-evaluation rather than by external evaluation. Freedom is the atmosphere for viable learning. In creative effort, criticism from outside is fruitless. A self-reliant and independent atmosphere is most suited for significant learning.
8. Learning the process of learning is the most useful learning in the contemporary world. It involves a continuing openness to experience, and incorporation into oneself the process of change.

Teaching today is concerned with covering the syllabus. The goal of education must be the facilitation of change and learning. According to

Rogers, the only man who is educated is the man who has learned how to learn; the man who has learned how to adapt and change; the man who has realised that no knowledge is secure, that only the process of seeking knowledge gives a basis for security. The important thing in learning is learning how to learn in order to cope effectively in a scientific world that is changing fast.

TEACHER AS FACILITATOR OF LEARNING

Teaching and learning are not one and the same. If teaching is learning, we would have learned several good things in life from teachers. However bad a teacher may be, she/he must have taught only good things inside the class. But, the question is how many good things have we learned? Does teaching have any consequential effects on our behaviour? If it is not so, then what is the role of a teacher? According to Rogers, the function of a teacher is to facilitate learning. From facilitative learning emerges significant, experiential learning by the whole person. Contemporary education does not teach us how to live, especially how to live with others in cordial relationship. It has not helped us to aim something big and achieve it. Nobody can teach anybody anything. One can only help somebody learn when she/he is interested to learn. Socrates, the greatest philosopher and teacher, said that he is only a midwife to knowledge.

If significant learning is to transpire, then a personal relationship between the facilitator and the learner must exist. Certain attitudinal qualities are crucial to such a relationship, among the most important being: (a) realness or genuineness in the facilitator of learning, (b) prizing, acceptance, and trust and (c) empathetic understanding.

- a. *Realness in the facilitator:* learning is facilitated when the teacher is genuine, authentic, and honest. It means he is being himself, not denying himself. The teacher should establish a personal contact with the learner.
- b. *Prizing, acceptance, trust:* the second major attitudinal characteristic is prizing the learner, prizing his feelings, his opinions. The learner is accepted as a person of worth, a unique individual and is respected. Her or his feelings and opinions are prized. The learner is seen as trust-worthy. All this is unconditional; there is no demand that the learner be different or conform in some way to be accepted and respected.
- c. *Empathetic understanding:* the third attitude of the facilitator contributing self-initiated experiential and meaningful learning is empathetic understanding. It is understanding which comes from putting oneself in the place of the student to understand

her or his reactions, to experience the student's perception and feelings about what is happening. Viewing the world through the student's eyes, is almost unheard of in the classroom. Rogers suggests that if a teacher were able to make even one non-judgemental empathetic response to a student's expressed feeling, she or he would discover the power of such understanding.

SELF-ACTUALISATION IS THE MOTIVE

According to Rogers, the basic motive for growth and development in all humans is self-actualising tendency. It is the principal factor that effects change in learning. The teachers do not have to motivate the students; they are self-motivated. Learners, who are in real contact with life problems, wish to learn, want to grow, seek to find out, hope to master and desire to create. The teachers' function is to create a suitable atmosphere for learning experience, to permit the self-actualising tendency to operate freely. The teacher is a facilitator, facilitating the freedom to learn by developing a relationship and creating an atmosphere that is conducive to self-motivating, self-actualising, significant learning. Any learning that significantly influences behaviour is self-discovered, self-appointed learning; that is, the mainspring of change, the principle characteristic of learning, is effected through motivation generated from the self-actualising tendency.

EVALUATION IN EDUCATION

Rogers' theory of significant learning has no place for the examination system as it is practised in our schools and colleges. He repudiated the system of evaluating the learner by external criteria. Current examinations are sterile; they run counter to meaningful learning. He argued forcefully that examinations have become the beginning and end of education. Students face endless tests and examinations in their courses. Such obstacles prevent students from engaging in the independent learning necessary to a creative life. He asserted that examinations are set by life and the learner must confront the examinations of life. Sometimes, he passes them and, at other times, he does not. The learning experience must be so structured that learners organise to contend with life tests more effectively.

In a properly structured learning experience, the teacher-facilitator provides resources requisite for dealing with numerous life situations. Rather than an external evaluation system in which the learner is exposed to failure imposed by the institutional grading system, Rogers proposed programmes of self-evaluations. According to him, the learner is the final judge; he selects a course of study commensurate with the motivation of self-actualisation; he does not have to confront the pseudo-examinations of the classroom. He reads books for their intrinsic value to learning rather

than for their importance to sterile classroom examination.

THE GOAL OF EDUCATION

The purpose of education is to make the students healthy and fully functioning persons. Rogers has sketched the portrait of fully functioning persons as part of his theory. According to him, fully functioning persons exhibit the following characteristics:

1. They are open to experience. They are not defensive; they are fully aware of their experiences, their feelings, their fears and pains, and accept them rather than shutting them out.
2. They trust their fellow human beings. They do what they feel is right. It does not mean they are always right. They make their own choices, experience the consequences and correct them if they are less than satisfying.
3. They are characterised by existential living. They live their experiences as they occur in the present, without trying to superimpose preconceived meaning on them. They are open and flexible, deal with the experience as it is, and discover its meaning for themselves.
4. They are creative. Creativity emerges when one is open to new experiences, trusts one's own judgements, and takes risks if she/he feels good about a new venture.

5. They live richer lives than other people do. They live the good life, not in the sense of happiness, contentment, security and bliss (although they experience these feelings at appropriate times), but a life that is exciting, challenging, meaningful and rewarding. They take risks, experience pain occasionally and face challenges courageously.
6. They are honest and open. They reject the hypocrisy prevalent in contemporary society — in governance, religion, family and education. They are open in dealing with others. They believe that institutions exist for human beings and not *vice versa*.
7. They are indifferent to material comforts and rewards. They are not concerned with status but prefer to relate to people in informal, egalitarian ways.
8. They are caring persons. They have a deep desire to help others, to contribute to society. They voluntarily help others in crisis.
9. They have deep distrust of cognitively based science and technology that is being used to exploit and harm nature and people. They believe that significant discoveries involve feelings. They do not want technology to destroy environment. They support technology only when it is wisely used to promote human welfare.
10. They will live with others in the maximum possible harmony. They have unconditional self-regard and regard for others.

Rogers knew that such people are a small minority of the total population. However, he firmly believed that they are having an impact on society out of proportion to their numbers and will continue to exert significant influence in the future.

CRITICAL ASSESSMENT OF ROGERS' VIEWS

According to Rogers, the present-day educational system bases its programme on a set of faulty assumptions. First of all, it assumes that students cannot be trusted to pursue their own educational goals. Teachers exhibit their mistrust of students by constantly supervising and checking on them and their work. If students were allowed to make their own choices concerning their educational goals, he believed, there would be no need to monitor their behaviour so closely because they would be positively motivated to study and learn. Surveillance is necessary to ensure compliance only when teachers set goals that are irrelevant or radically at variance with student concerns and interests.

Rogers' assumption that students should be allowed to make their own educational choices and set their own goals, because they know best what is right for them, is not taken well by some critics. They assert that

this assumption seems dubious, in view of the continual shifting of goals experienced by many students in the course of their educational careers. Further, even if they could choose the goals that are right for them, students exist in a society that may not recognise the worth and usefulness of their aims. People have the right to pursue whatever goals they wish, but society also has the right to express its priorities and reward those it considers worthy.

Rogers strongly objected to what he considered the primary emphasis in education — students as passive learners. College students, for example, typically receive information from their teachers and are expected to reproduce it in examinations. This approach stifles original and creative ideas. Rogers argued that, in an atmosphere of trust, mutual respect, and freedom from constraints, students freely test their own ideas and become creative individuals.

Several people do not agree with Rogers on this point. They argue that many people throughout history lived with constraints of institutions but still became creative. It is clear from history that the mere absence of constraint or evaluation is not a necessary condition for developing creativity. Great ideas are not gathered while sitting under the banyan tree. Thomas Edison once said that creativity is 99 per cent perspiration and 1 per cent inspiration. That is, the individual must synthesise a great deal of information before attempting to solve a problem. It does not mean that all of Rogers' views have been rejected. There is almost universal acceptance of his ideas that (1) students need to be treated with consideration and respect by their teachers, (2) teachers and students need to communicate and cooperate, and (3) teachers need to encourage students to maximise their creativity following mastery of the fundamentals.

REFERENCES

- LEMBO, J.M. 1972. *Learning and Teaching in Today's Schools*. Merrill. Pub. Co.
- ROGERS, C.R. 1969. *Freedom to Learn: A View of What Education Might Become*. Columbus, Ohio: Merrill. Pub. co.
- ROGERS, CARL, C. LYON, HAROLD LYON, AND REINHARD TAUSCH. 2013. *On Becoming an Effective Teacher-Person-centered Teaching, Psychology, Philosophy, and Dialogues with Carl R. Rogers and Harold Lyon*. London: Routledge.

Understanding Philosophical Orientations of Paulo Freire

SONIKA CHAUHAN*

Abstract

This paper attempts to understand the theoretical underpinnings and work of Paulo Freire and to study the philosophical foundations of his work. It outlines the influence of Marxist and Christian thoughts on the formulation of his liberatory theory. The paper offers insights into the inevitable connect between Freire's Marxist thought and his religious commitments and affiliations and how it shaped Freire's philosophical understanding and views on knowledge as constructed rather than derived and must be understood contextually as historically and culturally informed discourses. In the first section, the paper distinguishes between radical and liberal ideology and how Freire's writings can be placed under the radical liberal humanistic vision of education. This paper further explores Freire's educational philosophy as shaped and influenced by his life experiences and helped him develop his idea of conscientisation as derived from his religious beliefs. The paper concludes that Freire combined both material and cultural reality to articulate a process of social change and therefore gives prime importance to education in his revolutionary theory of social transformation.

INTRODUCTION

Paulo Freire is generally considered to be 'the inaugural philosopher of critical pedagogy' (McLaren, 2000).

The writings of Freire provide a critical perspective on education and help us to recognise the relationship between education and power.

* *Ph.D. Scholar*, Central Institute of Education, Department of Education, Delhi University, Delhi.

He was the first internationally recognised philosopher who saw every educational act as political and raised vital questions on the issues of oppression, marginalisation, dominance and liberation. He brought the political nature of education to the public discourse, and the effects of unequal power relations affecting education that inevitably emerge from capitalist economies. In the contemporary times, when educational scenarios across the world have been dominated by the neo-liberal ideologies, the work of Paulo Freire has been considered seminal as it provides a provocative lens for examining educational policies and practices. Most of the educational policies remain silent on issues of political, economic and cultural ideologies and on how these ideologies work together to reproduce discriminatory practices. Thus, it becomes imperative to look at the theoretical underpinnings and work of Paulo Freire to understand the subordination of the wider aims of education by market forces.

In the current educational context, the ideas of Freire help in creating conducive learning environment for bringing equality and social justice in education. This paper will offer a descriptive perspective to understand Freire's writings which have been considered eclectic by many scholars. His writings draw from varied sources ranging from philosophical to sociological, and he drew insights from different disciplines and

traditions. He amalgamated ideas of Existentialism, Marxism, Humanism, Radical Liberation Theology and Dialectics to form his own theory that addresses education and its relation with social change. In order to understand the writings of Paulo Freire, it becomes crucial to focus on the social and philosophical background that forms Freire's educational thought. This paper is an attempt to understand Freire's philosophical orientation that shaped his educational ideas and, in this respect, an attempt has also been made to study the impact of Marxist ideology and Christian influences on his work.

Freire developed his conception of education as a practice of freedom significantly from both radical and liberal perspective on education. This made his theory an area of constant contestation. Allman (1994) argues with conviction that the misappropriation of Freire into "educational practice is not necessarily due to his faulty theorising; but the lack of understanding of his philosophical roots in Marxism as well as of misunderstanding the vital differences between a liberal and radical ontology" (cited in Mayo, 2008, p. 5). To understand and appreciate the depth of Freire's work, it is crucial to locate both radical and liberal elements in his writings as well as understanding the elements of Marxian theory. The following section of the paper would try to demarcate liberal and radical

ideologies in educational thought and place Freire’s theory accordingly.

RADICAL AND LIBERAL EDUCATION

Askew and Carnell (1998) use a four-fold classification based on a matrix (Figure 1) that maps beliefs about knowledge and the role of education in society. They raise fundamental questions such as: Is knowledge extrinsic or intrinsic to the individual

and is the task of education to fit people into existing society or to question the nature of that society?

One can see that the radical education stands in sharp contrast to a liberal conception of education. Here, liberal education is referred to the ‘modern’ liberal education, which is the product of the Renaissance and Industrial Revolution and not specifically the ‘ancient’ tradition

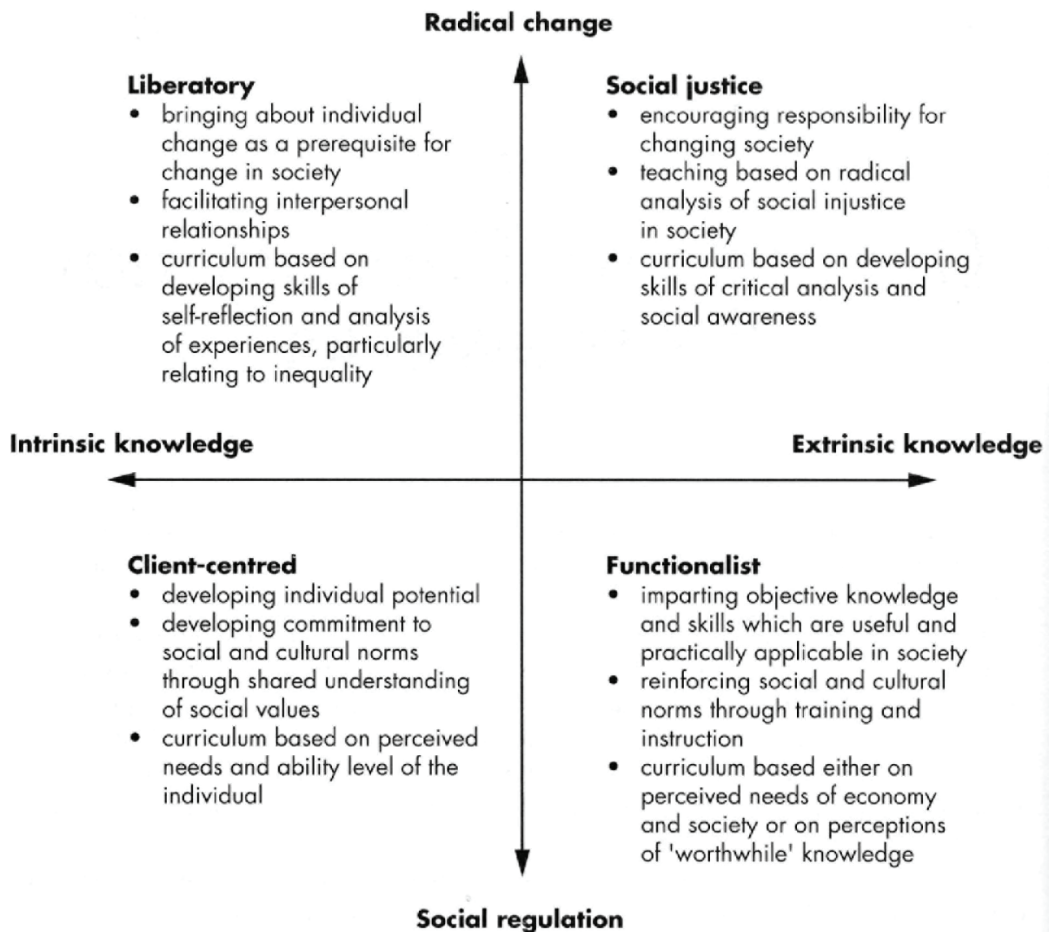


Figure 1. Radical and Liberal Education
Source: Askew and Carnell (1998)

of liberal education¹. With the spread of capitalism and the advent of mass schooling as an institutionalised form of education, notions about individuality, ability, meritocracy *versus* equity and social justice have been in contestation. Thus, the institutionalisation of education has to deal with issues of choosing the individual freedom to excel or to cater to the notion of social justice for an equitable education. As stated earlier, the vital differences between radical and liberal ideology were important to understand Freire's writings. One of the key differences between a liberal and radical ontology revolves around the relation between the individual and community. Lange (2012) explains that radicals proposed a social ontology whereby individuals are fundamentally individuals-in-social-relations rather than liberal autonomous individuals who relate to the external world. Liberal education focuses upon the individual and his self-refinement whereas Marxist thinkers recognise individual only as a part of the collective. For Marx, individuals are constituted by their relations to other humans, to history, and to society. This Marxian ontology is diametrically opposed to the liberal ontology within capitalist free market societies — where reality is composed of separate, atomistic individuals who relate to each other and things in external ways.

Further, Marx suggested that politics and economics were conceptually separated in liberal

bourgeois thought as a way to dominate without appearing to dominate. For instance, as long as people have a vote and a say through their representative in a political democracy, they will not contest injustice and the profound lack of democracy in the economic sphere. Allman (cited in Mayo, 2008, p. 9) argues that thus “liberal notions of freedom are illusory. There is a profound lack of democracy in economic lives.” Freire too was acutely aware of capitalism and its relation with economy. He developed his pedagogy keeping in mind the Brazilian rural poor who were oppressed by large landowners, as well as with the urban poor who had been dispossessed of their land and subsequently urbanised and exploited (Lange, 2012). He assumed that both groups had already been enclosed into a capitalist economic system where they had become ‘beings-for-another’ rather than ‘beings-for-themselves’. They had been subsumed into a system of domination where “the oppressor consciousness tends to transform everything surrounding it into an object of its domination... everything is reduced to the status of objects at its disposal” (Freire, 1970, p. 44). Hence, for both Marxism and Liberalism, education is an instrument to achieve different goals. A detailed discussion on radical and Marxian theoretical underpinnings is elaborated in the next section.

Marx strongly asserted that liberal society artificially separates

individuals from the community, community from environment, economics from politics, and production from production relations, rather than seeing these phenomena as all internally related, as faces of the same phenomena. For Marxists, schooling as it exists in liberal and industrial society maintains and upholds the *status quo* of the privileged. No aspect of material life remains untouched by capitalist beliefs, which transmits its ideology through various institutions of society — education being the foremost. In fact, Marxists² claim that liberalism is the ideology of the ruling class. This leads us to an inevitable connect between education and ideology. Often, ideology is closely coupled with the concept of power. The dominant group maintains its ideological control through hegemony (Gramsci, 1997). Hegemony thus governs common sense or reality by making particular ideas seem normal or natural. David Hicks (2004, p. 2) argues that ideology is therefore not “something abstract since it powerfully shapes our perceptions of both self and society”. Radical ideology in education challenges the fundamental premises of these dominant beliefs and tries to find the roots of the economic, political and social disparities in society. Radical education often makes a crucial distinction between schooling and education. With the advent of industrialisation and the increasing division of labour under capitalism

led education manifest itself in the form of schooling. Radicals like John Holt (1969), Paulo Freire (1970) and Ivan Illich (1971) find the process of schooling as detachment from the child’s immediate environment and as an act of ‘banking’. They view schooling as essential to promote the continuity of *status quo* in existing unequal structures. This view stands in sharp contrast to the functionalist view of education where schooling is perceived to contribute to social consensus and restoration of social order.

Radical-Marxists criticise schooling for its role in sustaining and strengthening *status quo*. Lichtenstein (1984) distinguishes between radical liberalism and Marxist analysis of education (left wing radicalism) in his paper on ‘Radical Liberalism and Radical Education’. He argues that radical liberalism is an association of two divergent philosophical perspectives that is liberalism and left-wing radicalism. The ‘liberal’ perspective seeks to liberate individuals from political and/or economic power, and the ‘radical’ perspective seeks to overturn a social order based on privilege and property. He builds that these radical theories of education lie in a distinct paradigm of traditional liberalism on the one hand, and Marxism on the other. As the radical theorists share the liberal thrust of traditional liberalism, they discard the three basic principles of liberalism, which are: possessive individualism, private

property and political democracy (Lichtenstein, 1984).

On the other hand, the radical liberal paradigm shares a Marxist critique of education, while rejecting the materialistic philosophy of Marxism. Lichtenstein (1985) termed this paradigm as a critical, non-Marxian analysis of the education process. Therefore, the intermediate position taken by this paradigm, Lichtenstein assigns the term 'radical liberal' to it. Subsequently, he outlines six characteristics or 'coordinates' of this philosophical foundation such as *pluralism, developmental individualism, solidarity, egalitarianism, participatory democracy* and *social transformation*. Each of these is elaborated in the following section.

Pluralism supports autonomous and voluntary associations of people in which political and economic power is vested equally. A society constitutes of various centres of power and of people with diverse interests. It opposes the sovereignty of the centralised state and the concentrations of political and economic power. According to Freire, the banking model of education violates basic pluralistic values by centralising initiative and authority. Thus, students have no capacity to exercise control over the educational process, and become mere receptacles of given information.

Developmental Individualism here means the pluralistic ethic of a developmental range and not the

possessive individualism as viewed by neo-classical economic theory. Radical liberals 'see the human essence not as consumption of utilities but as the active exertion and development of individual potentialities'. Freire (1970) observes how the creative and activist impulses of people are negated by education. The culture of the oppressor dominates the oppressed class and the latter learn to imitate their oppressors by accepting it.

The third coordinate of *Solidarity* refers to the individual's identification with the group (community, nation). It is a form of collective consciousness. It is opposed to anti-authoritarianism, and to systems of meritocracy and hierarchy. However, Lichtenstein (1985) reminds the distinction between 'weak' solidarity of radical liberal position and the 'strong' solidarity of the socialist view. He also highlights how a yearning for a pre-industrial brotherhood, an idea central to modern Christian humanism, is foregrounded in the work of Freire.

Egalitarianism manifests itself among radical liberals as a total rejection of social privilege and social oppression. It hopes for a classless future where all individuals are equally free. For Freire, the education-led social revolution would negate the oppressor-oppressed negation, and would presumably result in a classless, egalitarian society.

Participatory Democracy negates the mainstream idea of a liberal

distinction between the political and the social-economic spheres. It demands participatory as opposed to representative democratic principles to all spheres of life. Freire viewed the problem posing method of education as the one in which knowledge is created through active participation and dialogue. Participants would relate in a non-authoritative manner. Thus, students would become teachers, and teachers would become students in a Freirean classroom.

The last characteristic is *Radical Transformation* that sets the radical liberal apart from the mainstream laissez-faire liberal (Lichtenstein, 1985). It envisions a radical transformation of the modern industrial society to promote egalitarian, developmental, solidaristic, participatory and democratic ideals. It is a desire for a revolution in cultural values and in social practices through education. 'The primary goal of radical liberal educators is the liberation of people from oppression and from the constraints imposed by a class-divided industrial society. They see a social transformation leading to a non-alienating, developmental, libertarian culture.'

However, a close examination of the radical liberal literature reveals that the radical liberal vision of a humane, developmental, participatory and egalitarian learning environment is not unique and is generally shared by Marxist educators as well. Lichtenstein argues that radical

liberal and Marxist education theory are different on the issue of education, and therefore should not be placed in the same 'radical' category. Although both emphasise the reproduction and legitimisation of the economic system through education, radical liberal educators tend to attribute the problems of contemporary education to the commercialisation of social values and the dehumanisation which arises out of industrialisation. Similarly, Marxist educators observe the same problems in education but attribute these problems directly to the dynamics of capitalism.

They believe that it is not due to industrialisation, or cultural deterioration *per se* but the exploitative and authoritarian manner in which production occurs in capitalistic economic system. Lichtenstein further attributes the difference between radical liberal and Marxist educators directly to the materialistic philosophy which defines Marxism. As for Marx, matter is the ultimate reality, that is, only the material things are real; thus he totally rejects the metaphysical position which postulates the ultimately real in the non-material. This approach is typically rejected by radical liberals. Radical liberals give more attention to the prospects of social transformation (which both groups desire) through conscientisation. For them, education leads to liberation and can emancipate humanity by awakening and elevating the consciousness (i.e., 'conscientising', to use Freirean terminology) of the

learner. Thus, radical liberals give prime importance to education in their theories of social change.

Marxist educators, on the other hand, stress the primacy of capitalist production, and would directly link any educational alternative to more fundamental economic alternatives. For Marxists, the radical liberals do not tie 'their praxis-oriented, consciousness raising education alternative to a larger programme of revolutionary change' (Lichtenstein, 1985, p. 1). Thus, they view the radical liberal approach having a transcendental, idealistic and utopian quality to it. In the light of the above, it can be argued that Freire's work is perceived with the radical liberal humanistic vision of education. His critique of education is tied to a critique of capitalism but he gave importance to Cultural Revolution that can be brought in through education rather than material reorganisation of society as espoused by orthodox Marxists. As articulated above, that Freirean theory derives its substance from Marxism; therefore in the following section, the areas of similarity and departure from Marxist theory are discussed.

INFLUENCE OF MARX OVER FREIRE

At the core of Freire's pedagogy lies the basic principles of Marxism and to appreciate his pedagogical theory, it is important to understand the Marxian underpinnings inherent in his work. Allman elaborates that the

Pedagogy of the Oppressed is written in a dialectical style and his dialectical conceptualisation of oppression and revolution are deeply rooted in his understanding of social theory derived from Marx. Mayo (2008) echoes the same concern asserting that the more one is familiar with Marx's conception of dialectics, inner connections and relations, as 'unities of opposites', the more one begins to appreciate the *Pedagogy of the Oppressed* and its Marxian underpinnings. Just like Marx, Freire's use of the term 'oppressor' and 'oppressed' referred to historical class distinctions and class conflict within the structures of capitalist society. Thus, Freire's idea of oppression draws from a classical Marxian theory of history where he saw both liberation and oppression as historical, collective actions of classes. To dwell deeply on Marxian influence on Freire's work, it is important to understand the use of the concept of Dialectic Materialism and Alienation present in his writings.

DIALECTIC MATERIALISM

Drawing on ideas from Hegel and Marx, Freire adopted a dialectical approach towards understanding the world. Glass (2001) asserts that Freire's theological ontology and his theory of conscientisation shades into Marxist politics that reinterpreted Hegel's analysis of the master-slave relationship. Dialectical materialism is a complex theoretical and philosophical system. However, a brief introduction about the

concept is necessary to explain its usage in Freire's work. Dialectics as a notion tries to understand the essence of the things rather than their appearance. It begins with the opposite characteristics of objects to understand its true essence as it is believed that everything is not as it appears on the surface. In dialectics, the form and content of a thing can be contrary. The tensions between these contradictions can be understood through dialectics. Thus, the underlying idea is that all things are actually processes and that these processes are in constant motion, or development. This development is driven by the two interrelated opposites acting in contradiction with each other (Gadotti, 1994; Au, 2007). These two opposites exist with each other as they make up a unified whole. Hence, they are deeply integrated. A dialectical conception of the world sees it as a layered, interrelated system, a totality, a chain of relationships and processes (Gadotti, 1994). Dialectics can be understood to mean that everything in the universe — including society — is in a state of constant conflict and change. The tensions and conflicts in contradictory aspects become the driving force for change.

Freire's position is consistent with the fundamental tenets of dialectical materialism as he placed particular emphasis on contradictions in the social world. For him, any social phenomena cannot be understood in isolation, rather as a part of

totality. Therefore, the contradiction between oppressor and the oppressed in his theory subsume a dialectic relationship as oppressors can only exist as oppressors in the presence of their opposite, the oppressed and the two groups stand in an inherently contradictory relationship. He equated dialectic thinking with critical thinking and called the process of dialectical thinking as "epistemological encircling: a means of moving closer by gaining a certain kind of distance" (Roberts, 2000, p. 37). Just as Marxist dialectics could only be understood by the practical struggle to overcome the contradictions in capitalism, in a similar vein Freire's conception of dialectics can be perceived not just in thought, but also in practice. His notion of praxis: a dialectic relation between theory and practice, can be seen as an extension of Marxian thought.

ALIENATION

Freire built upon Marx's notion of alienation. For Marx, the material conditions of life generate alienation. Capitalism generates economic alienation, which touches every aspect of people's lives. Marx refers to the alienation of people from aspects of their 'human nature' and through alienation, men get estranged from the product of their labour, from their species-being. He believed that alienation is a systematic result of capitalism (Mathews, 1980). Freire in a similar light condemned the liberal notion of society being a collection of

isolated and atomistic individuals. Subsequently for Freire, there is no private conscience but a socially formed one. He rightly focused on a network of social relations rather than the individual and believed that practice, struggle and politics are the essence of social transformation.

FREIRE AND EARLY MARX

Freire's writings draw from the early humanitarian Marx where Marx specifically critiqued industrial capitalism and envisioned a social change process beyond it. To quote Marx, "The materialist doctrine that men are products of circumstances and upbringing, and that, therefore, changed men are products of other circumstances and changed upbringing, forgets that it is men who change circumstances and that it is essential to educate the educator himself." In these few words, Marx showed that changes in society are not the result of mechanical results from changed circumstances, but arise from human beings, own activity in changing their circumstances. Marx gave primacy to freedom and envisaged education and free time as essential to developing free individuals and 'creating many-sided human beings' (Kellner, 2003, p. 3). In this way, increasing free time under socialism would allow for more education and development of a social individual. These early writings by Marx provide important sources of reference for some of the arguments raised in Freire's best known work,

Pedagogy of the Oppressed. Freire's reading of Marx influences his notion of oppressor and oppressed and his conception of praxis. It seemed that he took Marx's famous observation quite seriously that, "the philosophers have only interpreted the world differently: the point is, however, to change it" (Marx cited in Craig, 2005, p. 620).

Consequently, Freire's notion of praxis that humans have the ability to consciously and intentionally transform the world, derives straight from Marx's ideas about revolution. According to Freire, what makes us distinctly human is our ability to engage in praxis. Praxis is 'reflection and action upon the world in order to transform it' (Freire, 1972, cited in Roberts, 2000, p. 42). Similarly, Freire's notion that human beings are makers of history (1998, p. 115) too is 'influenced' by Marx's view of humans as determined by history. In *Pedagogy of the Oppressed* (1970, p. 44), Freire describes what he calls the process of dehumanisation as: "Dehumanisation, which marks not only humanity stolen, but also (though in a different way) those who have stolen it, is a distortion of the vocation of becoming more fully human. This distortion occurs within history; but it is not a historical vocation. Indeed, to admit of dehumanisation as a historical vocation would lead either to cynicism or total despair."

Like Marx, Freire too believed that human nature is not individualistic but a collective product. For Freire, our consciousness is first and

foremost a social consciousness (Roberts, 2003). Thus, for Freire (cited in Au, 2007, p. 5), “Subjects cannot think alone” and that there is no longer an ‘I think’ but ‘we think’. Humans, as communicative beings, enter into relationships with one another, and create a social world. Like Marx, Freire too stressed on unity, solidarity and a shared sense of commitment among the oppressed towards creating a better social world. He insisted that the unity of human beings is all the more important in our current “perverse era of neoliberal philosophy” (Freire, 1998, p. 115).

Freire’s indebtedness to Marx included understanding the impact of material conditions on human agency. In *The German Ideology* (cited in Dale and Hyslop-Margison, 2010, p. 111), Marx and Engels wrote, “It is possible to achieve real liberation only in the real world and by real means...Liberation is a historical and not a mental act.” However, Freire extends this understanding further by viewing liberation not entirely as a historical act (although this recognition is important), but as a mental act as well. For Freire, change in the form of social transformation could only occur through reflection, recognition and action of the oppressed to free themselves from oppressive conditions (*Ibid.*). This is an important point of departure from Marxist theory.

DIVERSION FROM MARXIST IDEOLOGY

Freire’s pedagogy, at its core, is based on a Marxist, dialectical

materialist epistemological view of consciousness, human interaction, and material transformation (Au and Apple, 2007). There are excellent treatises on Freire’s Marxist politics (McLaren, 2000), his Marxist conception of consciousness (Allman, 1994). However, Au (2007) argues that a sustained explication of the Marxism in Freire’s pedagogy remains absent. Marx never explicitly wrote about education and his sphere of writings revolved around economics and society. In contrast, Freire takes the sphere of education to be of central importance. In addition, Marxist thinking underpins Freire’s belief in the conditioning (but not determining) of people by their socio-historical reality (Freire, 1998, pp. 54–58, 115–116); this is an important diversion from Marxist thinking. In Freire’s words, “If I am a pure product of genetic, cultural, or class determination, I have no responsibility for my action in the world and, therefore, it is not possible for me to speak of ethics. Of course, this assumption of responsibility does not mean that we are not conditioned genetically, culturally, and socially. It means that we know ourselves to be conditioned but not determined” (*Ibid.*, p. 12).

While Freire did indeed see an objective world outside of our consciousness, he also recognised that it was a world that we learn through our subjective lenses as human beings (Roberts, 2003). This is an important point of

departure from Marxist thinking. In his work, he attempted to posit a dialectical relationship between the objective world and our subjective understanding and knowledge of that world. For instance, in *Politics and Education* (Freire, cited in Au, 2007, p. 19), he addressed the issue as follows: “Consciousness and the world cannot be understood separately, in a dichotomised fashion, but rather must be seen in their contradictory relations. Not even consciousness is an arbitrary producer of the world or of objectivity, nor is it a pure reflection of the world.”

Marx and Freire’s notion of history differs in another important aspect. Though Marx argues that humans are subjected to history and act according to socio-historical antecedents, Freire maintained that humans can shed shackles of history through critical historical analysis. In his view, individual and social transformation is possible through this historical analysis. The ultimate resolution of Marxism is communism, for Freire resolution is achieved through conscientisation. Freire however avoided the deterministic implications of Marxism by emphasising the existential capacity of humans to influence their circumstances. He did not negate the phenomenal and existential nature of the individual. For Freire, humans, though historical beings are aware of a past and are able to conceive of a future. As responsible beings, humans have an awareness of their

own unfinishedness (Freire, 1998, p. 56). Humans, unlike animals, make history and thus consciously transform the world around them. The vocation of all human beings is to realise this capacity — to live as social, historical, thinking, communicating, transformative, creative persons (*Ibid.*, p. 45). He further built that humans are in constant, dialectical, critical reflection with the material and social worlds. The capacity that makes us human is that we can wishfully act through our critical reflection to change those worlds.

Fatalism present in both classical Marxism and neoliberal ideas was troubling to Freire because it eroded the primary role of human agency in bringing social change and eliminated history in the process. Freire was critical of class relations as he believed that oppression does not take place only on the social plane but also at the individual level. And it is just on this level that authoritarianism can be seen and it is just here that oppression must begin to be fought by changing the consciousness of both the oppressed as well as the oppressor. Unlike Marx, Freire talked about a cultural reorganisation of society although he did not negate the importance of the material reorganisation of society. Freire gave precedence to culture as a ‘superstructure’ rather than material reality. So, ‘salvation’ comes from pedagogy that ignites political consciousness and leads to revolution. Further, he argued that

“I interpret the revolutionary process as dialogical cultural action which is prolonged in ‘cultural revolution’ once power is taken” (Freire, 1970, p. 160). For Freire, ideology cannot be changed through martial laws. Aspects of the previous ideology which are found inside the same educational practice can be questioned through education. One cannot hope that, when the mode of production is changed, all social relationships will mechanically change. Thus, Freire maintained that “Dialogue with the people is radically necessary to every authentic revolution” (*Ibid.*, p. 90).

Further, Freire stated “Through... cultural remnants the oppressor society continues to invade” (1970, p. 159). For Freire, revolutionary leaders must “initiate a cultural revolution”. Cultural revolution takes the total society to be reconstructed, including all human activities, as the object of its remolding action. In his words, “It is the revolutionary regime’s maximum effort at conscientisacao [conscientisation] — it should reach everyone, regardless of their personal path” (Freire, 1970, pp. 158–59). Unlike radicals (Holt, 1967; Illich, 1973) who went for a complete overhaul of the schooling system, Freire saw possibility in existing schools although he was criticised by left-wing scholars for defending school system. He argued that schools can perform other tasks rather than reproducing the dominant ideology. This does not exhaust the role of the school. For

him, schooling can contradict the task of reproducing the dominant ideology and thus demythologise ideological reproduction (Gadotti, 1994). Hence for Freire, there are no short cuts for a revolution. Revolution should be brought in by listening to the oppressed; should incorporate the already possessed knowledge of the people and work upon their already possessed understanding to bring in conscientisation.

FREIRE AND CHRISTIANITY

Lichtenstein (1985) argues that Freire’s analysis of liberation and social change can be best understood in reference to his Christian humanist heritage. Marx negates the role of religion as he believed that it preserves the social order of which it is a by-product, both by deflecting attention from unquestioned belief and by providing escape from the real. On the contrary, for Freire, Marxism and Christianity could be regarded by some as contradictory frameworks, but insisted that he was able to manage that tension: “I always spoke to both of them [Christ and Marx] in a very loving way. You see, I feel comfortable in this position. Sometimes, people say to me that I am contradictory. My answer is that I have the right to be contradictory, and secondly, I don’t consider myself contradictory in this... if you ask me, then, if I am a religious man, I say no...I would say that I am a man of faith...I feel myself very comfortable with this” (Horton and Freire, 1990,

p. 247). Gadotti (1994, p. 64) remarked that “As a left-wing thinker, Paulo Freire believes that being a Christian does not mean being a reactionary, and that being a Marxist does not mean being an inhuman bureaucrat. Christians should reject exploitation.”

During his youth, Freire found inspiration in the French tradition of Christian humanism. Through his involvement with the youth catholic action movement, Freire familiarised himself with the incipient liberation theology movement that endorsed the principle that Christians have a moral obligation to reject exploitation (Gadotti, 1994). His work as a consultant for the World Council of Churches for a period of 10 years further exposed him to what was to be known as the most radical version of liberation theology, which is actually heavily Marxian. However, while working with workers and peasants, Freire started to question notions of exploitation, inequality and started to explore answers through Marxist theory. Indeed, in many works, particularly the *Pedagogy of the Oppressed*, Freire used some of the analytical tools of Marxism. This nevertheless did not make him abandon his Christian humanist philosophy: “God led me to the people, and the people led me to Marx ... But when I met Marx, I continued to meet Christ on the corners of the streets - by meeting the people” (Freire, 1974, cited in Walker, 1980, p. 126).

CONCLUSION

To conclude, it is precisely in this dialogue between Christian humanism and Marxist humanism where the foundation of Freire’s philosophical approach and the core concepts of his political-educational theory can be traced. He combined both material and cultural reality to articulate a process of social change; therefore his work can be perceived with the radical liberal humanistic vision of education. Notwithstanding this, it is important to note that the radical liberal call for social revolution through education is possible through praxis which is the core of his epistemology, as the process of human critical reflection and taking conscious, transformative action on the world. Through praxis, humans act both individually and collectively as subjects in the world as opposed to being objects to be acted upon. They can act to transform their reality as subjects. Freire viewed it as a constant state of development in which humans go on to a state of being, in search of becoming fully human and can achieve liberation from oppression. Cultural revolution will help in viewing liberation not entirely as a historical act but as a mental act as well. Change in the form of social transformation could occur first through reflection and recognition; and then through the action of the oppressed to free

themselves from the oppressive conditions. The oppressed imbibes their marginal and subordinate status and their general submersion into a 'culture of silence' thus becoming objects to be acted upon (Freire, 1970, p. 30). Only through

this process can people come to see and act upon the oppressive relations in which they find themselves. Revolution through 'conscientisation' is, according to Freire, the act of creating a humanised world; it is an act of love and humility.

End Notes

1. For ancient Greeks, liberal education was necessary for a human being to be free and identify with human good. The development of the human being to their full potential was considered necessary through education so that people can participate in civic life.
2. Here Marxism refers to the orthodox view that has a strong characteristic of economic determinism rather than humanitarian Marxism which stresses on the humanist components of Marx's thought.

REFERENCES

- ALLMAN, P. 1994. Paulo Freire's Contributions to Radical Adult Education. *Studies in the Education of Adults*. Vol. 260. No. 2. pp. 144–61.
- ASKEW, S. AND E. CARNELL. 1998. *Transforming Learning: Individual and Global Change*. Continuum International Publishing Group.
- AU, W. (2007). Epistemology of the Oppressed: The Dialectics of Paulo Freire's Theory of Knowledge. *Journal for Critical Education Policy Studies*. Vol. 5. No. 2. p. 13.
- AU, WAYNE AND M. APPLE. 2007. Freire, Critical Education, and the Environmental Crisis. *Educational Policy*. Vol. 21. No. 3. pp. 457–70.
- CRAIG, E. 2005. *The Shorter Routledge Encyclopedia of Philosophy*. Routledge.
- DALE, J.A. AND E.J. HYSLOP-MARGISON. 2010. *Paulo Freire: Teaching for Freedom and Transformation: The Philosophical Influences on the Work of Paulo Freire*. Springer.
- FREIRE, P. 1970. *Pedagogy of the Oppressed*. New York: Continuum.
- . 1998. *Pedagogy of Freedom: Ethics, Democracy and Civic Courage*. Rowman & Littlefield.
- GADOTTI, M. 1994. *Reading Paulo Freire: His Life and Work*. SUNY Press.
- GLASS, R. 2001. On Paulo Freire's Philosophy of Praxis and the Foundations of Liberation Education. *Educational Researcher*. Vol. 30. No. 2. pp. 15–25.
- HICKS, D. 2004. Radical Education. In *Education Studies: A Student's Guide*. Routledge: Falmer.
- HOLT, J. 1964. *How Children Fail*. New York. Pitman Publishing Corp.
- HORTON, M. AND P. Freire. 1990. *We Make the Road by Walking: Conversations on Education and Social Change*. Temple University Press.
- ILLICH, I. 1973. *Deschooling Society*. Hammondsport UK: Penguin.

- KELLNER, D. 2003. Critical Theory. In R. Curren (Ed.), *A Companion to the Philosophy of Education*. Blackwell Publishing.
- LANGE, E. 1998. Fragmented Ethics of Justice: Freire, Liberation Theology and Pedagogies for the Non-Poor. *Convergence*. Vol. 31. No. 1. pp. 81–94.
- . 2012. Is Freirean Transformative Learning the Trojan Horse of Globalization and Enemy of Sustainability Education? A Response to C.A. Bowers. *Journal of Transformative Education*. Vol. 10. No. 1. p. 321. DOI:10.1177/154134612453880
- LICHTENSTEIN, P.M. 1984. Some Theoretical Coordinates of Radical Liberalism. *American Journal of Economics and Sociology*. Vol. 43. No. 3. p. 333.
- . 1985. Radical Liberalism and Radical Education. *American Journal of Economics and Sociology*. Vol. 44. No. 1 pp. 39–53.
- MATHEWS, M.R. 1980. *The Marxist Theory of Schooling: A Study of Epistemology and Education* (Vol. 24). Harvester Press Brighton.
- MAYO, P. 2008. Antonio Gramsci and Paulo Freire: Some Connections and Contrasts. In C.A. Torres and P.A. Noguera (Eds.), *Social Justice Education for Teachers: Paulo Freire and the Possible Dream* (pp. 50–68). Rotterdam: Sense Publishers.
- MCLAREN, P. 2000. Paulo Freire's Pedagogy of Possibility. In S.F. Steiner, H. Krank, and P. McLaren (Eds.), *Freirean Pedagogy, Praxis, and Possibilities: Projects for the New Millennium* (pp. 1–22). New York & London: Falmer Press.
- ROBERTS, P. 2000. *Education, Literacy, and Humanization: Exploring the Work of Paulo Freire*. Westport, Conn.: Bergin & Garvey.
- . 2003. Knowledge, Dialogue, and Humanization: Exploring Freire's Philosophy. In M. Peters, C. Lankshear, and M. Olssen (Eds.), *Critical Theory and the Human Condition: Founders and Praxis* (pp. 169–83). New York: Peter Lang.
- WALKER, J. 1980. The End of Dialogue. Paulo Freire on Politics of Education. In R. Mackie (Ed.), *Literacy and Revolution: The Pedagogy of Paulo Freire* (pp. 120–50). New York: Continuum.

Colonial Codification of Education in India until 1920

PREETI*

Abstract

This paper seeks to understand the nature of colonialism and the nuances of education provided by it through the lens of curricular knowledge in social and natural sciences and technical education till 1920. The British Indian education is conceived in India as an act of securing and consolidating power. By the introduction of the 'complete system of education', the British sidelined indigenous education which was marked by diversity. Certificates and exams became 'a guarantee for high ability and valuable attainments'. The realignment of education brought consent to the British rule which the military power could not have achieved. The Indian subjects were informed that colonial education aimed at bringing 'modernity' among the natives. But in the garb of bringing 'modernity', it brought a culture of certificates, marksheets and medals which became the prized possessions of 'haves'. The major social function which colonial education fulfilled was to differentiate the 'haves' from the overwhelming majority of 'have-nots'. However, Indians were not meek spectators either. Several Indian intellectuals set up their own model schools. Active demands put up by the Indian leaders to have more technical colleges attest to Indian participation in education. Therefore, no simple model or statement can be devised to understand why colonial education had the kind of effects it had.

* M.Phil. Scholar, Zakir Hussain Centre for Educational Studies, School of Social Sciences, Jawaharlal Nehru University, New Delhi-110067.

THE FOUNDATION

In 1757, when the East India Company started its political career in India, it had its own traditional system of imparting education to the students. Initially, the East India Company had no plans to impose a westernised system of education on its Indian subjects. "Its lack of interest in education is not surprising since its primary motive was trade and it did not in any way wish to tamper with social and religious institutions" (Basu, 1982, p. 3). Robert Clive too maintained the view that there should be no interference in the existing system of education. Men like Warren Hastings, Jonathan Duncan, Mount Stuart Elphinstone, Mr. Fraser and Sir William Johns gave encouragement to the Orientalist studies. However, the "early policy of encouraging oriental education was soon questioned in England" (Basu, 1982, p. 2). The challenge came basically from three groups, namely, the Evangelicals, the Liberals and the Utilitarians. Although they themselves had huge ideological differences, they all agreed at a point that the Indian society had to be radically transformed. Both the Anglicist and the Orientalist factions were equally complicit with the project of domination, the British Indian education having been conceived in India as a part and parcel of the act of securing and consolidating power.

THE INDIGENOUS SYSTEM OF EDUCATION

Education was one such institution which could lead to the transformation in society. However, this is not to

suggest that there was no educational system in pre-colonial India. The surveys done in 1820s and 1830s by the government in the Presidencies of Bengal, Bombay and Madras, have shown that India had a deep-rooted and widespread system of education. But, one needs to keep in mind that it was not a centralised or homogenous apparatus of education. Indigenous system of education comprised "a vast network of *pathshalas* and *maktabs* for elementary education; *tols*, *agraharams* and *madrasas* for higher learning; Arabic, Persian, Bengali and literatures; and the provisions of domestic instruction for many boys and especially girls by their parents, relatives, or privately engaged tutors" (Gupta, 2012, p. 31).

Poromesh Acharya's study of Bengal showed that *pathshalas* were of the exclusive status of Brahmins in society. The existing hierarchical structure of society was justified in such *pathshalas*. However, "indigenous education was not limited to Brahmins alone, as there is evidence of some pupils from so-called polluting castes receiving elementary education, and even some Chandals working as teachers" (Gupta, 2012, p. 32). In fact, Satish Chandra Mitra, in his book, *Jessore Khulnar Itihas*, states that the Muslims won recognition for being efficient *pathshala* teachers by the end of Pathan era. Acharya further showed that within the indigenous system of education as well, we can see huge diversity and change.

In fact, there was not one single system of education for the different strata of the rural people but two distinct systems, to suit broadly the two main classes of conflicting interests, viz., the landlords, the leisured class or zamindars, and their associates, on the one hand, and the rest of the working people, on the other (Acharya, 1978, p. 1981).

The *zamindars* tried to educate their children at home, at the same time, the *raiyats* and the petty traders sent their children to the *pathshalas*. But, one needs to take note that although the lower castes were allowed to take elementary education, they were debarred from taking higher education due to the social taboos. W. Adam pointed out that in Bengal and Bihar, there was on an average a village school for every 63 children of school-going age.

We can see a shift among the trends followed by the indigenous schools. “The *maktabs*, however, retained their religious character intact while the *pathshalas* were steadily becoming secular” (Acharya, 1978, p. 1983). Hence, these indigenous schools were not static. Although they were numerous in number, they almost remained isolated from each other. They did not know the subjects they taught and the curriculum followed. The courses of studies usually offered by the Sanskrit schools comprised

Hindu Law, Logic, and Literature, viz., *Smriti*, *Nyaya*, *Kabya* and *Alankar*. While the Persian and Arabic schools offered many courses of Muslim Law and Islamic religious science, i.e, the Quran, the Tafsir, the Hadith and the Fiqh. The Persian schools also included in their courses some of the literary and historical works like ‘Padnameh’, ‘Amednameh’, ‘Gulistan’, ‘Abul Fazzal’, etc.

ACTIVE INTERVENTION OF THE BRITISH

The indigenous system of education continued more or less in the same form till 1813 when the British tried to introduce a ‘complete system of education’. The Charter Act of 1813 “produced two major changes in Britain’s relationship with her colony: one was the assumption of a new responsibility toward native education, and the other was a relaxation of controls over missionary activity in India” (Viswanathan, 1990, p. 23). Moreover, Macaulay’s minute and Benedict’s resolution in 1835 marked a change from the previous era. Education was becoming more ‘homogenised’. New syllabus was drafted and students from all walks of life could get educated. The Despatch of 1854 declared that the system of grants-in-aid should be based on an entire abstinence from the interference with the religious instruction conveyed in the school assisted. It was carried forward in the Hunter Commission’s Report of 1883.

The Hunter Commission clearly articulated that if any institution or teacher wants to teach or instruct students in religious matters they can do separately, but it could not be a part of school curriculum. The Hunter Commission clearly articulated that those schools which were granted aid from the government were to be opened for pupils belonging to 'all castes and classes of the community'. Some assistance could be granted to the poor students belonging from low castes. Assistance was recommended to schools and orphanages in which poor children were 'taught reading, writing, and counting, with or without manual work'.

A special attention in moral education was also emphasised. The Hunter Commission aimed at giving a good moral character and strong physical qualities to students. "We therefore recommend that physical development be promoted by the encouragement of native games, gymnastics, school drill, and other exercises suited to the circumstances of each class of school" (Hunter, 1883, p. 127). Because they thought that a sense of right and wrong should prevail among the students. "When a boy knows and keeps his proper place in the school, he will be in some degree trained to keep it in the world also" (Hunter, 1883, p. 128). Moral deterioration in Indian school boys can lead to departure from the gentle and respectful manner of 'old times'. And therefore inspecting officers and teachers were recommended

to observe the conduct of children. Krishna Kumar tries to understand the nature of colonial enterprise. "At the heart of the colonial enterprise was an adult-child relationship. The coloniser took the role of the adult, and the native became the child" (Kumar, 1989, p. 45). The state's role in this vision was that of a protector of the 'ignorant masses' who personified the 'Asiatic mind' portrayed by James Mill in his popular *History of British India*. Education was perceived as the chief agency for accomplishing the great moral agenda of colonialism. The colonial enterprise always needed the moral climate of the Victorian age in England.

CASE STUDIES: THE CENTRAL HINDU SCHOOL AND THE ARYA MAHILA COLLEGE

To manifest the impact of various reports, we can take the case study of two educational institutions which started within three decades. Namely, the Central Hindu College founded in 1898 and the Arya Mahila School founded in 1926. These two institutions are specially dealt with because these two institutions were following the parameters set up by the colonial state but, at the same time, "they were resisting colonial dominance" (Kumar, 1996, p. 137). They were trying to give a new impetus to Hindu religion. They tried to institute Hinduism 'through rituals and to Indianise schools'. They valued *dharma*, *sabhyata*, *samskara*, *gyan*. "They were opposed in concept

to Western civilisation and life-style, and described typically by adjectives like *prachin* (ancient), Aryan, and vedic” (Kumar, 1996, p. 135). The students had to learn science and other Western subjects which were made compulsory by the government. But, the school authorities made a compulsion to teach religion. “The optional subjects of religion, Sanskrit, music, and art, were unpopular partly because they were additional to an already complete syllabus, and partly because they were unofficial and unrecognised” (Kumar, 1996, p. 146).

Nita Kumar acknowledges that the educators had to pay dearly because they doubled the burden of students for making them study the compulsory subjects as well as the religious subjects. The teaching of English became a compulsory part of the school curriculum along with history, geography, mathematics and science. The emphasis was on granting ‘secular education’.

Translated into secular terms, classical humanism assured protection of the integrity of native learning, defusing potential protest by Indians against overtures of cultural domination, for quite independently of the actual sentiment of officials toward the native culture; the classical model in delineating disciplinary boundaries around subjects as independent areas of

study permitted the assertion of the respective claims of both Oriental and Western learning to the status of true knowledge without necessarily invoking normative criteria (Viswanathan, 1990, p. 46).

This produced a chain reaction effect. “Educational enterprise became favourite sphere of revivalist mobilisation” (Kumar, 1990, p. 4). The Hindu revivalists’ major task was the development of Hindi as a medium of modern education. Krishna Kumar argues that the revivalist organisations like the Arya Samaj or Rashtriya Swayamsevak Sangh were not anti-modern but they took a different route to modernity rather than prescribed from the colonial rule. Hindi increasingly acquired the status of a unifying language which unified all the Hindu to fight against the British as well as to distance themselves from the Urdu speaking Muslim population. The reasons they cited were basically two “...:one, that Hindustani, as a spoken idiom of the common man, is inadequate for serious discourse; and two, that it cannot promote national integration as sanskritised Hindi can, for traces of Sanskrit are found in all Indian languages” (Kumar, 1990, p. 17).

Subsequently, Hindi was approved as a subject for the intermediate examination in the United Province in the late twenties. The Indian Press got a boost from it. The Indian Press emerged as a near monopoly house of textbooks in Hindi. “A full-fledged

Hindi print industry developed only from the late 1860s” (Stark, 2007, p. 33). Robinson points out that print gradually induced religious change. “With nascent Hindu nationalism and revivalism, Hindi was assigned an important new role as the vehicle of a distinct Hindu consciousness and was soon to challenge the position of Urdu” (Stark, 2007, p. 32).

WOMEN’S EDUCATION

In the elite circles in pre-British India there were strong precedents of female intellectual participation. Women from respectable families often studied classical or vernacular literature as a recreation, and girls from propertied families learned some accounting skills. The upper classes were restricted to learning at home by the strict seclusion practised by their families. But, most women learned the household arts and the performance of duties with ‘sacred’ or ‘semi-sacred’ associations. However, women were neither ignorant nor without ‘knowledge’. “Women, more than men, were responsible for the oral transmission of knowledge, which usually came in the form of smriti literature, music, ballads and folklore” (Sen, 2002, p. 202). G.W. Leitner wrote about Punjab that the upper class Hindu and Muslim women used to receive some education at home or through religious institutions, and that a large number of women in princely states were found to be literate at the time of annexation. But, with the coming of

the British the structure of education got realigned. When it was decided in 1813 that the colonial government was to undertake some responsibility for imparting education to its Indian subjects, and again in 1835, when it was decided that this education was to be education in western knowledge, the authorities had only their male subjects in mind. “The education of women was not high on the agenda in Britain at the time, and the small resources to be devoted to educating England’s Indian subjects were not to be wasted on the lower classes or on women” (Seth, 2008, p. 137).

It was in the 1840s when the unmarried female missionaries arrived in India, and were assigned the work of educating women and children in their homes. “The Protestant missionary societies were the first to address the issue of girl’s education” (Rao, 2013, p. 352). The Wood’s despatch for the first time offered the provision for imparting education to females. “Mary Carpenter’s intervention was highly significant. It sponsored energetic debates on female education, particularly within the ranks of the ICS, if not so much within the education service itself, in the late 1860s” (Allender, 2013, p. 330). It was later echoed in the Hunter Commission’s Report and other subsequent reports. “The progress and development of women’s education during the British rule was very nominal in comparison to the education for males” (Paul, 1989,

p. 3). The uprising of 1857 which gave a serious blow to the colonial government made them cautious and a policy of social and religious neutrality was declared by the Queen. The participation of a large number of women, including Laxmi Bai, Tara Bai, Sunder, Moti Bai in the mutiny made the government a little more careful about the promotion of education. The overall progress was slow and the 1881 Census showed that there was just one woman under instruction for a population of 403 women in Madras. However, a considerable private and collective effort made by the Indians and Europeans cannot be overlooked in shaping women's education. Officials like Bethune, Reid and Howard's patient work had already clearly demonstrated what was possible without strong intervention from the centre. Pandit Ishwar Chandra Vidyasagar set up more than 40 schools for women from 1855 to 1858.

During the colonial period, the three important agencies that promoted women's education were the Christian missionaries, the male intelligentsia and the British government. The missionaries were pioneers in this field, but the thread of their activity was gradually taken up by educated Indian men (Srivastava, 1998, p. 275).

The government policy mainly concentrated on primary education. There was hardly any school in the

rural area for girls. Government schools, with their dark, stuffy classrooms and lack of space for the girls to run about, were only an extension of the unhealthy atmosphere of the women's life at home. Shortage of teachers was a perennial problem with girls' schools set up by the government. The schools in the cities were drawing women students mainly from Anglo-Indian, European, the Indian Christian, Parsee and a few enlightened and well to-do Hindu and Muslim families. Only 50 women schools out of 81 were run by their grants-in-aids. All this hindered the growth of secondary education of women and the little efforts made by local bodies in promoting secondary education. Secondary education among the women could not make much headway.

At first sight a different result might have been expected; the explanation lies in the fact that girls' schools are for the most part supported by private agencies, while of boys' schools, a much larger proportion is maintained either by government or by local boards, involving consequently a much greater charge on public funds (Review of Education in India, 1886, p. 284).

Nurullah and Naik in their study showed that when Curzon came to India only 2.5 per cent of the female population of school-going age was in school and the total expenditure was

11 lakhs, as compared to 80 lakhs on boys' education. Due to government's negligence of the women's education it became imperative for the western educated Indian intelligentsia to shoulder the responsibility of women's education. Mill's *Subjection of Women* (1869) became popular among the Indian educated, who often spoke in favour of female equality. Comte wrote about the absolute necessity of women's equality. His ideas had a major impact on the intelligentsia of all the three presidencies.

Western ideas helped these men examine their society to find out what retarded it. It became clear to them that, in addition to the caste system, social progress was blocked by old customs and traditions, particularly those that affected women: infanticide, child marriage, enforced widowhood and purdah (Srivastava, 1998, p. 276).

People like Gopal Hari Deshmukh, G.G. Agarkar, Mahadev Govind Ranade, Kashinath Trimbak Telang and R.G. Bhandarkar, took up the liberal ideas in their writings and speeches. Indian students were often required to reflect upon this aspect of Indian society. The status of women was a popular essay and exam question, particularly in the first half of the 19th century. In 1889, around 549 members of the Indian National Social Conference pledged to abstain from alcoholic drinks, cease the practice of dowry and child

marriage, endorse widow remarriage, and educate their daughters. But, this did not mean a complete equality between the male and female education. By and large, academic education was thought to be for boys, while 'domestic' education was for girls. They wanted to make them an ideal housewife which was the need of the urban middle class household. In fact, the curricula of girls' schools were quite different. In 1882, the Education Commission explicitly recommended separate curricula for girls to draw in a larger body of women. The curricula varied from school to school, but almost all girls' schools taught hygiene, needlework, household management and child-rearing. Moreover, the Sadler Commission of 1917 "encouraged the religious value systems to mingle with women's education" (Paul, 1989, p. 11). Not many secondary schools were funded by the government. Moreover, out of the total 81 secondary schools, the colonial government fully financed only 6 secondary schools. Only the Bethune College was financed by the colonial government that too after 20 years of establishment. Initially, women were not permitted to enrol themselves at any of the universities opened up in the presidencies. The others were financed and managed by private bodies and missionaries. They did not even recognise the S.N.D.T. Women's University till independence.

To manifest the cause and effect of the women's education, one has to

delve into ideology of the society in general and state in particular.

The State system of instruction, as regards control, inspection, and textbooks, has been framed with a view to the requirements of boys; and it needs modification in many important points if the education of girls is to receive due encouragement (Review of Education in India, 1886, p. 278).

B.M. Malabari once stated that “In the moral and spiritual education of men, refinement of life, improvement of the home, upbringing of children, and implanting true faith in the hearts of men, the sphere of women is absolutely boundless.” Dalpatram, a well known poet, wrote that there were many advantages in educating one’s daughter, including, the prevention of petty quarrels among women. Narmada, the poet, claimed that “An educated man cannot share his life with an illiterate wife. Education will make a woman a better wife, a better daughter-in-law and a better mother”. Statements made by these prominent public figures underline the basic motive of the society in general, and state in particular. They did not want their female counterpart to be competitive or mannish.

However, the ideal of monogamy coupled with the need to establish men’s mastery in the home, loaded the sexual expectations from a wife in new ways. On the one

hand, men asserted their own sexual control over the body of the wife; on the other, the wife was expected to combine the accomplishments of a courtesan with the domesticity of a wife to please the monogamy bound husband (Malhotra, 2009, p. 125).

Women were not expected to be professionals. Manmathnath Ghosh wrote in 1863, “dullness in a girl was considered a virtue and smartness in conversation a crime, smarter and competent women were a threat to patriarchy”. They were expected to be good wives, daughters, mothers and nothing more. They were expected to be a guard of their husband’s petty salary, at best. Women’s relationship was being reworked with her husband, his family, and the world outside, a restructuring, in other words, of the daily business of living. The feudal background coupled with modern education enabled ‘the educated middle class’ to reinforce feudal hierarchies and gender disabilities. Hence, a feudal relationship was envisaged even while imparting ‘modern’ education to women.

TEACHING OF NATURAL AND SOCIAL SCIENCE: THE ESTABLISHMENT OF UNIVERSITIES

The rapid spread of a liberal education among the natives of India since that time, the high attainments shown by the native candidates for Government scholarships, and

by native students in private institutions, the success of the medical colleges, and the requirements of an increasing European and Anglo-Indian population, have led us to the conclusion that the time is now arrived for the establishment of universities in India, which may encourage a regular and liberal course of education by conferring academic degrees as evidences of attainments in the different branches of art and science, and by adding marks of honour for those who may desire to compete for honorary distinction (Biswas and Agrawal, 1986, pp. 24–25).

“The establishment of the Calcutta, Bombay and Madras Universities in January 1857 marked beginning of modern higher education in India” (Paul, 1989, p. 8). These were called the ‘first generation universities’. Initially, the government performed the examining role only. Fees had to be borne by the candidates. The ‘second generation universities’ included the Benares Hindu University, the Allahabad University, the Aligarh Muslim University, etc. For the Allahabad and the Benaras Hindu Universities, the immediate model, for all subjects, was the Calcutta University, of which they were offshoots. From 1890s to mid-1920s, Allahabad was an affiliating and examining, not a teaching university. By 1914, there were thirteen M.A. colleges, inspected

and approved, Nagpur and Lahore among them, and there were eleven accepted up to the B.A. standard, including Meerut and Indore. College libraries were small and their funds were even smaller. In 1915, the first university library was opened. The most ‘popular’ subjects offered were English, Geography, History, Law, etc. The arts courses attracted the students more. “The pattern of studies in rhetoric and logic then current in England provided a convenient model for adaptation in India” (Viswanathan, 1990, p. 46). However, science was also taught in the university but it was made compulsory even in the schools as well.

Science was expected not just to improve India materially, but intellectually and morally as well. Bernal looked at science as an occupation which had three aims namely the psychological, the rational and the social. David Arnold talks about the Indian science which was not static, the trans-regional exchange took place in the field of science. Even after the decline of Mughal Empire, “the decentred nature of India’s political and cultural system enabled, most obviously (though not uniquely) in the eighteenth century, several centres of science, technology and medicine to flourish at the same time and for each to develop its own distinctive characteristics” (Arnold, 2000, p. 7). Dharampal too attests this point. “The artificial making of ice seems to have been till then unknown in Britain” (Dharampal, 2000, p. 19).

He further gives the example of inoculation and plastic surgery in the field of medicine. The Benares observatory made by Raja Jayasinha, production of iron and steel in several parts of India, etc., were the examples given by Dharampal to show that India also had a very developed science, technology and medicine in India. But by eighteenth century, the science and technology started lagging behind. David Arnold too agrees to the point that with the advent of the colonial state, it tried to superimpose its modernity over India. But, he suggested that the exchange of knowledge would have been better for the Indians.

He further talks about the East India Company's policy towards promotion of science, medicine and technology in India. "The British enjoyed the company of science; it would be excessive to suggest that they ruled by it" (Arnold, 2000, p. 25). Much of the scientific endeavour undertaken during the East India Company's rule took place outside or on the margins of the state institutions. Many early accounts on Indian geology were written by military officers and army surgeons, not as a part of their official duties, but under the stimulus of personal interest and in the course of cross-country marches. The Company's servants who wished to pursue scientific interests remained heavily dependent on the approval and funding of the Court of Directors or the Governor General in India.

But, they hardly showed any interest except a few like Wellesly. "Rarely did European men of science retire in the country" (Arnold, 2000, p. 24). Even if they showed interest in research, their main aim was to facilitate revenue collection in the newly conquered areas of South Asia.

The researches done in India provided data upon which further researches were done in England. Museums were set up to display the researches done in India. It became also "a way of establishing a self-esteem of colonial science" (Arnold, 2000, p. 29). Moreover, the Asiatic Society started taking interest in science. Journals like *The Journal of the Asiatic Society*, *Gleanings*, *The Calcutta Journal of Natural History*, etc., came into being. But, the readership was considerably low. However, one cannot view that the Indians were "totally isolated from the scientific enterprise of the period" (Arnold, 2000, p. 33). Bal Shastri Jambhekar was one such. S. Irfan Habib opines that people such as Ramchandra, Syed Ahmad Khan, Munshi Zakaullah, etc., "went to sensitize vernacular Indian cultures to modern science" (Habib and Bhattacharya, 1998, p. 345). Ramachandra thought that the task of communicating scientific knowledge in local language would enable the Indians to contribute to the development of science. In 1868, Imdad Ali founded the Bihar Scientific Society. Munshi Zakaullah

translated books. “His first book on mathematics, called *Tuhfat-ul-Hisab*, appeared in 1852; it is considered one of the first books in any Indian language in modern Western mathematics” (Habib and Bhattacharya, 1998, p. 347).

Medicine

Deepak Kumar talked about the western medical discourse. “It functioned in several ways: as an instrument of control which would swing between coercion and persuasion as the exigencies demanded, and as a site for interaction and often resistance” (Kumar, 2000, p. 32). He clearly showed that earlier when the Europeans came to India as travellers they showed respect for the local *vaidyas* and the *hakims*. In fact, India had the tradition of collaboration in medicine. But, things started changing with the colonial rule. And the indigenous systems felt so marginalised that they did not collaborate even if they could have done it. The Western Science put emphasis on the cause of the disease, the Indians on *nidana* (treatment). “Microbes and microscopes constituted the new medical spectacle. But, the *vaidyas* put emphasis on the power of resistance in the human body” (Kumar, 2000, p. 33).

Indians were essential, nonetheless, to the organisation and dissemination of the Western medicine. In Calcutta in 1824, and in Bombay two years later,

training institutions were set up for the purpose, primarily designed to supply the army with sub-assistant surgeons, dressers and apothecaries. “With respect to medicine, official policy seems all along to have been directed to the practical goal of providing cheap but reliable medical aid for Company servants” (Arnold, 2000, p. 62). In 1835 Bengal, Lord Bentinck appointed a committee for the purpose of improving the constitution and extending the benefits of the Native Medical Institution and creating a system of management and education better suited to the official needs. After a heated debate, the committee advised the abolition of the Institution, along with medical classes at the Madrassa and Sanskrit College, and the creation of a new college to teach Western medicine exclusively and with English as the sole medium of instruction which was taken as the hallmark of a superior civilisation, a sign of the progressive intentions and moral legitimacy of colonial rule in India and the corresponding backwardness and barbarity of indigenous practice.

The Parsis formed the largest single contingent among early entrants to the college, forming more than 40 per cent of the intake between 1846 and 1866, but there were also substantial number of Christians and Hindus. Almost same was the scenario for women. Most of the women students in the medical colleges were drawn from the Anglo-Indian, Indian Christian and Parsee

communities. The Hindu and Muslim women in the higher professional education were almost non-existent. In fact in 1885, the Countess of Dufferin Fund was created to promote medical education among women. In 1902, there were 76 women in medical colleges and 166 in medical schools. Besides there were a fairly large number of women undergoing training as nurses, mid-wives, etc.

The scene started changing for the men, by the mid-1880s, nearly a third of the students at Grant Medical College were Hindus, drawn mainly from the higher castes, especially the Brahmins. Across the British India as a whole by the 1920s, about 1,000 Indians were employed as assistant surgeons in the provincial (or 'subordinate') medical departments, backed by a further 4,000 sub-assistant surgeons. Due to the limited career prospects and financial rewards that Western medicine offered, the Indian medical profession developed gradually, slower than in the more lucrative and prestigious fields of law and government service.

Technical Education

"The idea of providing technical education to the people of India by the Government was first mentioned in Sir Charles Wood's Educational Despatch of 1854" (Basu, 1982, p. 39). But, the schools and colleges which were teaching science, vocational studies and technical colleges were largely neglected. Even when the rule was given to the Crown, the scenario

did not change much. But this time, nationalist leaders and local committees kept on putting their demand for the technical education to the Indians. The Nainital Conference recommended a technological institute at Kanpur, the Shimla Conference of 1901 passed several resolutions on technical education, the Ootacamund Industrial Conference of 1908 also recommended that the Engineering College in Madras should be expanded.

The natives also felt the need for technical education and research. The Indian Institute of Science was conceived by Jamshedji Nusserwanji Tata as early as 1896. But, even "as late as 1919, senior government officials were arguing that one engineering college would suffice and that an output of about a hundred civil engineers was enough" (Basu, 1982, p. 50). One of the main reasons for the slow growth of engineering education was the lack of employment. Indian engineers were mostly recruited in PWD. And rest of the departments like railways, irrigation had European and Anglo Indians' predominance. The Census report of 1921 pointed out that there were 1,315 Europeans and Anglo-Indians officers against 262 Indians.

Between 1870 and 1914, "a science-technology-industry connection was beginning to be forged" (Raina and Habib, 2004, p. 76). The indigenous demand for an upgradation of courses in science and engineering became louder and

louder. Due to the constant demands raised by the prominent leaders like W.C Bonnerji, Anandamohan Bose, Chandavarkar, Madan Mohan Malviya, etc., that pressure could be built on the British rule. Sir Harcourt Butler too believed that industrial education was a good antidote to the political agitation. Moreover, the outbreak of the First World War gave stimulus that placed Indians in a better position. A mining school at Dhanbad was opened in 1921, the School of Arts and Crafts was opened in 1912 in Lucknow, the Mayo College of Art was opened up at Lahore. Aparna Basu opines that after 1920, the government started taking interest in opening technical colleges.

Social Science

Almost all the universities had the social science segment. It was so because unlike the natural science department which was expensive to maintain, social science department was relatively cost-effective as one need not spend on labs and equipments. Subjects like History, English, Law were quite popular among the students as it promised, to a larger extent, the government jobs ranging from civil services to lower level in the government job hierarchy. Literature and humanities were more popular among the students. They were a key to the ideologies born in the West. In fact, in the Bengal presidency, it became fashionable to study literature. People loved to

quote Shakespeare, Mill, Comte, etc., to underline their 'enlightened' thinking. Intellectual thinkers from the West became the yardstick to test one capability and to reform one's society. The so called western educated Indian intelligentsia always loved to read these famous writers which were necessarily considered as a key for even self-correction.

CONCLUSION

M.K. Gandhi very famously said at Chatham House in London on 20 October 1931, "I say without fear of my figures being challenged successfully, that today India is more illiterate than it was fifty or a hundred years ago, and so is Burma, because the British administrators, when they came to India, instead of taking hold of things as they were, began to root them out." In retrospect, the British in power effectively sidelined the indigenous system of education. The realignment of education brought consent to the British rule which the use of military power could not have. "The violence which had helped build the empire could henceforth be practised only on the outskirts of the proposed civil society. Within it, coercion had to be replaced by socialisation. This is where education had a role to play" (Kumar, 2005, p. 28). Hence, colonial education not only aided in producing clerks but also catered to the issues of moral agenda and 'cultural hegemony'. The Indian subjects were told that the colonial education aimed at

bringing 'modernity' among the natives. But, in the 'garb' of bringing 'modernity', it brought a different culture, culture of certificates, marksheets and medals which were the prized possessions of people. The major social function which it fulfilled was to differentiate its beneficiaries from the larger population. It created a gulf between have and have-not. "The so-called 'complete system of education' ultimately engulfed and emasculated the indigenous system into it" (Acharya, 1978, p. 1988). But,

one cannot deny the fact that Indians were not meek spectators either. This can be very much attested by the fact that people responded in their own ways like schools set up by Annie Besant and Vidya Devi or the surfacing of the Hindu-Urdu controversy or active demands put up by the Indian leaders to have more technical colleges. "No simple model or statement will help us understand why colonial education had the kinds of effects it had" (Kumar, 1989, p. 45).

REFERENCES

- ACHARYA, POROMESH. 1978. Indigenous Vernacular Education in Pre British Era: Traditions and Problems. *Economic and Political Weekly*, Vol. 13. No. 48. pp. 1981-88.
- ALLENDER, TIM. 2013. Colonial Anxieties: The State Embodiment of the Female Teacher-Trainer', 1808-1931. In Deepak Kumar, Joseph Bara, Nandita Khadria and Ch. Radha Gayathri (Eds.), *Education in Colonial India: Historical Insights*. New Delhi: Manohar Publications.
- ARNOLD, DAVID. 2000. *The New Cambridge History of India: Science, Technology and Medicine in Colonial India*. United Kingdom: Cambridge University Press.
- BASU, APARNA. 1982. *Essays in the History of Indian Education*. New Delhi: Concept Publishing Company.
- BISWAS, A. AND AGRAWAL, S.P. 1986. *Development of Education in India—A Historical Survey of Educational Developments Before and After Independence*. New Delhi: Concept Publishing Company.
- DHARAMPAL. 1995. *The Beautiful Tree: Indigenous Indian Education in the Eighteenth Century*. Goa: Other India Press.
- . 2000. *Indian Science and Technology in the 18th Century*. Goa: Other India Press.
- General Report on Public Instruction in the Lower Provinces of the Bengal Presidency, for 1862-63, with Appendixes*. 1863. Calcutta: The Baptist Mission Press.
- GUPTA, VIKAS. 2007. Social Agenda of Colonial Education: Textbook Discourse in the Mid-Nineteenth Century. *Indian History Congress Proceedings*, 68th Session, pp. 1113-1123.
- . 2012. Pluralism Versus Contest of Identities. *Seminar*. No. 638 (Oct.). pp. 30-36.

- HABIB, IRFAN S. AND SABYASACHI BHATTACHARYA. (Eds.) 1998. *The Contested Terrain: Perspectives on Education in India*. Orient Longman Limited.
- HUNTER, WILLIAM. 1883. *Report of the Indian Education Commission*, Superintendent of Government Printing, Calcutta.
- KUMAR, DEEPAK. 2000. Science and Society in Colonial India: Exploring an Agenda. *Social Scientist*. Vol. 28. Nos 5–6 (May–June). pp. 324–25.
- KUMAR, KRISHNA. 1989. Colonial Citizen as an Educational Ideal. *Economic and Political Weekly*, Jan. 28, p. 45.
- . 1990. Hindu Revivalism and Education. *Social Scientist*. Vol. 18. No. 10.
- . 2005. *Political Agenda of Education: A Study of Colonialist and Nationalist Ideas*. New Delhi: Sage Publications.
- KUMAR, NITA. 1996. Religion and Ritual in Indian Schools: Benaras from the 1880s to the 1940s. In Nigel Crook (Ed.), *The Transmission of Knowledge in South Asia: Essays on Education, Religion, History, and Politics*. Delhi: Oxford University Press.
- MALHOTRA, ANSHU. 2009. *Gender, Caste, and Religious Identities: Restructuring Class in Colonial Punjab*. New Delhi: Oxford University Press.
- MILL, J.S. 1869. *The Subjection of Women*. Hackett Publishing Co, Inc.
- PAUL, M.C. 1989. Colonialism and Women's Education in India. *Social Change*. Vol. 19. No. 2. pp. 3–17.
- RAINA, DHRUV AND S. IRFAN HABIB. 2004. *Domesticating Modern Science: A Social History of Science and Culture in Colonial India*. New Delhi: Tulika Books.
- RAO, PARIMALA V. 2013. Elite Conflict and Women's Education in Princely Mysore, 1860–1947. In Deepak Kumar, Joseph Bara, Nandita Khadria and Ch. Radha Gayathri (Eds.), *Education in Colonial India*. New Delhi: Manohar.
- RICHEY, J.A. (Ed.) 1965. *Despatch from the Court of Directors of the East India Company, to the Governor General of India in Council* (No. 49, dated the 19th July 1854). Reprinted National Archives of India, Delhi.
- SEN, SAMITA. 2002. A Father's Duty: State, Patriarchy and Women's Education. In Sabyasachi Bhattacharya (Ed.), *Education and the Disprivileged: Nineteenth and Twentieth Century India*. New Delhi: Orient Longman Private Limited.
- SETH, SANJAY. 2008. *Subject Lessons: The Western Education of Colonial India*. New Delhi : Oxford University Press.
- SRIVASTAVA, GAURI. 1998. The Contribution of Male Intelligentsia to Women's Education in Bombay Presidency during the Colonial Period. In Sabysachi Bhattacharya (Ed.), *The Contested Terrain: Perspectives on Education in India*. New Delhi Orient Longman Limited.
- STARK, ULRIKE. 2007. *An Empire of Books: The Naval Kishore Press and the Diffusion of the Printed Word in Colonial India*. New Delhi: Permanent Black.
- VISWANATHAN, GAURI. 1990. *Masks of Conquest: Literary Study and British Rule in India*. London: Faber and Faber.

Challenges and Responsibilities in Teaching in Emerging India

MANI SINGH*, CHANDAN K. SINGH**, AND P. K. SINGH***

“You cannot escape the responsibility of tomorrow by evading it today.”

Abraham Lincoln

Abstract

The concept of teaching has evolved with time and change in society. India has walked a long distance in ensuring access to education to the masses. Slowly but steadily the spotlight is shifting to quality, assessment and impact of educational methodologies from the quantitative factors like number of schools and enrolment. However, the coverage and quality of education in public schools are still debatable issues. Despite decades of government interventions, the socio-economic contexts of the country put up new challenges. However, there is hope from education and teachers only. Teachers are responsible for shaping the heart and mind of the nation through transforming the young generation into well-informed citizens. Education not only empowers and provides skills for a rewarding job and a good life, it also teaches how to live together in a conflict-torn world. It is a powerful tool for a developing nation like India to realise the potential of the demographic dividend. This paper explores the key parameters of teaching as well as the role and responsibilities of teachers in emerging environment and assesses how despite severe limitations there is scope to perform in an excellent way. Also, the paper touches upon some less talked about issues of teaching and the opportunity of improvement through self-upgradation and willful involvement.

* S-410, Nivedita Kunj, Sector 10, R. K. Puram, New Delhi.

** M-177, Pratap Vihar, Sector 12, Ghaziabad, UP.

*** 503, B-Wing, Ministry of HRD, Shastri Bhawan, New Delhi.

INTRODUCTION

Education is an essential element of human development. Besides playing a significant role in weaving the socio-economic fabric of the country, it provides essential knowledge and analytical skills to the citizenry which influence the life of the individual and entire society. It is also instrumental in the achievement of social, economic, political and humanitarian goals. Education as a social phenomenon relates to practically all changes taking place in the society.

Equipping young people with the knowledge and skills to achieve their full potential, participate in an increasingly interconnected global economy, and ultimately convert better jobs into better lives, is the main concern of policymakers around the world (OECD, 2014). Education is essential for healthy and resilient communities as it fosters inclusiveness, tolerance, ethics, responsibility, environmental awareness and effective democratic processes. Today, we live in a world full of social and economic conflicts which are damaging the basic social institutions such as family, community and the culture. In the given scenario, our teachings guide us how to live together. To participate in a global society, we must be able to live together in harmony with the neighbours with whom we may not share a common language, history, religion or outlook.

However, on introspection, as a nation we have not performed as good as we could have in providing required quality education. There is

no denying the fact that the public schooling system covers nearly 80 per cent of the children who attend school and comprises close to 93 per cent of the schools in this country. Nonetheless, there is further need of transforming the teaching process for the desired outcome.

THE CHALLENGES OF TEACHING IN INDIA

According to United Nations Educational, Scientific and Cultural Organization (UNESCO), the universal primary education will remain a dream for millions of children living in countries without sufficient teachers in classrooms. As per the projection, to achieve universal primary education, countries require to recruit more than 27 million teachers by 2030. India is one of the countries which ranks high in the shortage of teachers (UNESCO, 2014). In 2010, there were an estimated 13.3 million primary school-age children out of school in the South and West Asia region.



Figure 1. A school under a tree

Apart from the number of teachers and schools, there are a variety of challenges associated with education in India, ranging from poor infrastructure, enrolment, attendance, lack of motivated and trained teachers to the quality of teaching and teachers' absenteeism. There are other issues not so visible like teaching environment, academic difficulties, quality curriculum, effective assessment system, skill development and use of technology punishment, stress and other psychological issues, etc. Nonetheless, over the period the problems have become more qualitative in nature than quantitative.

BASIC INFRASTRUCTURE

The availability of schools and teachers are the bare minimum requirements for teaching. Though things started looking up since the last decade, but basic infrastructure has been a major obstacle in providing universal education. During 2000–01 to 2013–14, the number of primary schools has increased from 6,38,738 to 8,58,916, while the number of upper primary schools rose from 2,06,269 to 5,89,796 (NUEPA, 2014). Despite such efforts, there are many remote areas

across the country where schools are running under trees and they have to look for shelter when it rains. The flagship programme of Government of India — *Sarva Shiksha Abhiyan* dedicated to the universalisation of elementary education (UEE), has sanctioned 19.84 lakh posts of teacher since its inception, out of which only 15.06 lakh posts of teacher have been filled up. However, 4.79 lakh teachers are yet to be recruited (MHRD, 2014). The situation gets bleak given the teachers' absenteeism.

LITERACY IN INDIA

Several measures taken to improve the literacy rate in the country have resulted in improvement of literacy rate by 9 per cent, from 65.38 per cent (2001) to 74.04 per cent (2011), in the last decade. As per the Census of India, 2011, the number of illiterates in the country has declined to 28.27 crore from 30.41 crore in 2001. However, according to the *UNESCO Global Monitoring Report (2013–14)*, still around 37 per cent of the world's total adult illiterates are from India. India still figures low on the scale of literacy in comparison to many other developing countries (Table 1).

Table 1
Literacy Rates (15 years and above) in Developing Countries

Country	Year	Literacy Rate
World	2010	84.1%
China	2010	94.3%
Mexico	2010	93.1%
Egypt	2010	72.0%
India	2011	70.0%

Nigeria	2010	61.3%
Nepal	2010	60.3%
Bangladesh	2010	56.8%
Pakistan	2009	54.9%

Source: *Global Education Digest 2012* — UNESCO Institute for Statistics; *Census of India, 2011*.

In the Indian context, there is a remarkable literacy gap among male–female and rural–urban India, which has arisen due to various factors, including poverty, gender and social inequities, etc. Today, the country has a male literacy rate of 80.89 per cent and female literacy rate of 64.64 per cent. Out of 282 million illiterates in the country, two-third of them are women. The female literacy rate in rural areas is at an unacceptable low level of 58.75 per cent (Census of India, 2011). There is a clear impression of societal sexual discrimination in access to education in India. A lower women literacy rate results in higher levels of fertility and infant mortality, poorer nutrition,

lower earning potential and the lack of decision-making ability within a household. The education of women plays a significant role in improving their quality of life, both at home and outside. However, in the patriarchal setting of the Indian family, girls having lesser privileges and freedom than boys, get relatively far fewer opportunities for enrolment in the schools, and many of them drop out mid-way. If literacy rate of urban male (89.67 per cent) is compared with rural female (58.75 per cent) in the country, a huge gap of 30.92 percentage points emerges out (Figure 2). Given the facts, improving literacy in the country, especially among the rural women is a big challenge.

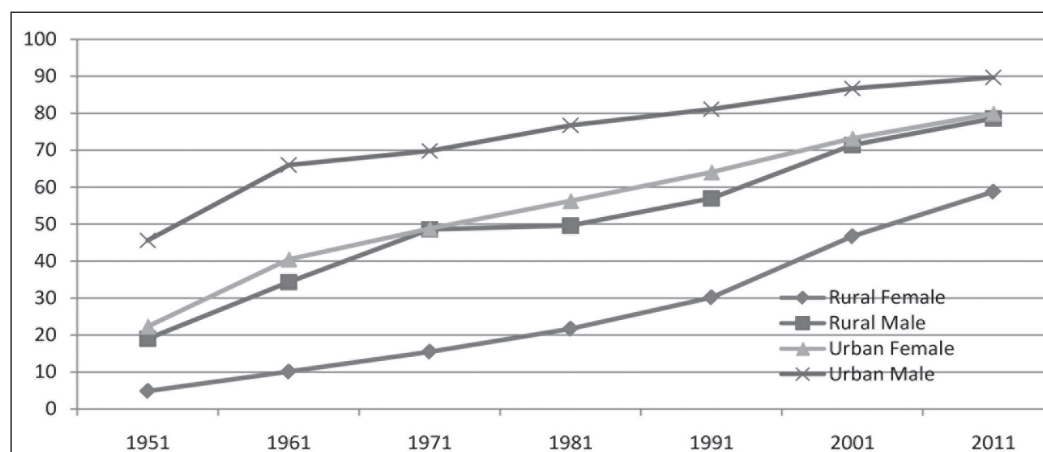


Figure 2. Sex-wise Literacy Rate among Rural & Urban India (Census of India, 2011).

ENROLMENT AND ATTENDANCE OF STUDENTS

The literacy rate and the enrolment of students in schools are mutually interdependent. The enrolment in the primary education from 2000–01 to 2013–14 has increased by 18.6 million (from 113.8 to 132.4 million), and in the upper primary by 23.7 million (from 42.8 to 66.5 million). The Net Enrolment Ratio (NER) in primary (age 6–10) and upper primary education (age 11–13) has improved to 88.08 per cent and 70.2 per cent respectively in 2013–14. The NERs, however, vary widely among States/UTs (NUEPA, 2014). A state-wise study reveals that little more than half of the States/UTs in India reports good attendance of students (NCERT, 2014). The enrolment status of out-of-school (OoS) children is extremely poor and that of children with special needs (CWSN) is unsatisfactory, which varies across different States/UTs in the

country. The country had about 19.4 crores children in the age group 6–14 (below 14 years), of whom 6.9 per cent children were out of school (EdCIL, 2005).

Besides, India also figures among the high dropout countries. UNESCO views early school leaving as a “lost opportunity” by the education system. There may be a variety of reasons behind it, but economic ones are the most important. The rural areas are linked to both higher rates of early school leaving and grade repetition. The students from disadvantaged backgrounds who might have benefited the most are very likely to lose it because of early school leaving (UNESCO, 2012).

A comparative analysis of the public expenditure on education and the Combined Gross Enrolment (CGE) in different countries reveals interesting correlation (Table 2).

Table 2
Public Expenditure and Combined Gross Enrolment

Country	Public Expenditure on education (% of GDP)	CGE in education for both sexes (%)
Australia	5.1	112
South Korea	5.0	100
Norway	6.9	98
USA	5.6	97
Nepal	4.7	77
China	–	72
India	3.3	70
Pakistan	2.4	45

Source: World Development Indicators 2013, World Bank; and Institute for Statistics, UNESCO (2013).

Beyond the physical access to schools, there is need of meaningful access which calls for high attendance rates, progression through grades with minimum possible repetition, and learning outcomes with assured core competencies. Further, within the country, a large variation exists across the states, geographical areas, and social categories such as gender, caste and ethnicity.

LACK OF TRAINED AND MOTIVATED TEACHERS

A teacher performs many jobs, but at the same time, she/he identifies and enhances the best in a student and instills necessary knowledge and skills to shape her/his life. Essentially the teaching profession should attract hardworking altruists who want teaching to improve children's life prospects. Contrarily, the system fails to attract such lot. Many Mexicans inherit their teaching jobs, Brazilian teachers earn less than other public servants and retire earlier. Each school day, a quarter of Indian teacher play truants. In New York, it is too hard to sack a teacher. Given this worldview, there is no wonder that so many students find learning so difficult (*The Economist*, 2015a, 2015b).

Apart from the adequate number of teachers, it is the quality of teachers which is very significant. In Teacher Eligibility Test (TET) conducted by the Central Board of Secondary Education (CBSE), declared on 27 December 2012, less than 1 per cent

of the appearing candidates (7.95 lakh) cleared the exam (TOI, 2013). The disconnect between the schools and the teacher training institutions and curricula of the schools and Pre-Service Teacher Education (PSTE) are also attributable to the poor teacher quality. The PSTE curriculum needs regular revision and synchronizing with existing needs. The B.Ed. programmes also need more emphasis on practical aspects than the theory parts (Yadav, 2011).

With increased emphasis, the States/UTs' governments have provided in-service training to a large number of teachers. More than three-fourth of the teachers in two-third of the States/UTs in India have undergone in-service training. However, the remaining one-third of the States/UTs provided training to less than 50 per cent teachers. Besides, there is a significant number of serving untrained teachers for which serious efforts need to be made (NCERT, 2014). Gradually, in-service training programmes need to emphasise training in new areas like continuous comprehensive evaluation (CCE), information and communication training (ICT), inclusive education, multi-grade teaching, proper use of teaching-learning material (TLM), content enrichment, innovative teaching strategies, morality and teachers' responsibility.

TEACHING QUALITIES AND TECHNIQUES

Unlike grown-ups, the young minds are unaware of many things. They

essentially need teaching with proper context to visualise the subject. A smart teacher knows how to introduce the topic to the class for arousing interest. She/he sets goals which not only give a better perspective to students to learn and realise the accomplishment, but also provides a reference for assessing the progress in learning. Certain classroom processes have been identified to evaluate the quality of teaching as an attempt to ensure quality interventions wherever required. A nationwide study on *Quality Interventions in Elementary Education* conducted by NCERT (2014) underscored a large gap in the actual and expected student's qualities at the Primary and Upper Primary stages in different States/UTs. It was also noticed that most of the classroom processes in the schools of a majority of States/UTs were not effective. Progress

on different identified classroom processes has been listed in Table 3.

CHANGING SCENARIO AND RESPONSIBILITIES

Traditionally, education fulfilled two functions — training the labour force as well as development and socialisation of the young generation. Over the period, the objectives and functions of education and its role in the life of a person and society have changed. The current socio-economic development and the acceleration of scientific and technological revolutions require more diversified education, allowing individuals to adapt to the rapid changes in economic, social, political and cultural life. Information on the performance of the education systems and techniques to assess and strategise has improved

Table 3
Progress of Classroom Processes in States/UTs

Processes found effective	Processes need improvement
<ol style="list-style-type: none"> 1. Classroom environment free from mental harassment/tension. 2. Free expression of feelings and problems by the children. 3. Answering students' questions/queries gladly by the teachers. 4. Proper use of blackboard by the teacher. 5. Classroom management. 	<ol style="list-style-type: none"> 1. Encouragement of children by the teacher to ask questions. 2. Sharing students' experiences. 3. Proper use of relevant TLMs. 4. Encouraging participation of all children. 5. Assessment of students' learning before moving ahead. 6. Conducive classroom environment for learning. 7. Overall effectiveness of the teacher learning assessment and children achievement.

Source: *A Report on Quality Interventions in Elementary Education* (NCERT, 2014).

significantly over the period. This provides valuable insights as to whether the inputs made into the system had a beneficial effect or not. The series of surveys not only provide policymakers, planners, curriculum developers and other practitioners with a 'snapshot' of what students have learned in main subjects, but also provide a baseline for comparison and monitoring of the changes. Different education programmes, initiated over the time, have been instrumental in transforming the educational scenario and the role of stakeholders.

FINE-TUNING EDUCATIONAL PROGRAMMES

During the last decade, the public education delivery system has improved. The educational programmes having wider coverage, specific objectives and higher impact have paid high dividends. These interventions have targeted and addressed variety of socio-educational gaps like universal enrolment, attendance, girls' education, children with special needs, inclusive education, teaching-learning material, classroom process, nutrition, hygiene and capacity building of teachers.

The Right to Education Act, 2009 provides right to children to free and compulsory education. Its implementation (April 2010) has strengthened commitment to quality elementary education for all children in the country. The *Sarva Shiksha*

Abhiyan (SSA, launched in 2001) is the programme for universalisation of primary education. The major goals and objectives of SSA as revisited in the context of RTE Act, 2009, includes: all children in schools, bridging gender and social gaps, universal retention, and elementary education of quality. The *Saakshar Bharat Programme* focuses on adult education and skill development with the objective of raising the literacy level to 80 per cent and reducing the gender gap to 10 percentage points by the 12th Five Year Plan. Launched in 2009, the *Rashtriya Madhyamik Shiksha Abhiyan (RMSA)* aims at providing universal access to secondary level education by 2017. *The Information and Communication Technology Scheme* (launched in 2004 and revised in 2010) meant for enhancing ICT skills and bridging the digital divide amongst students, and *The Scheme of Inclusive Education for Disabled at Secondary Stage (IEDSS)* (launched in 2009–10) meant for the inclusive education of the differently abled children in Classes 9–12 have been subsumed under RMSA. One of the world's largest and unique programmes for early childhood care and development was launched as *Integrated Child Development Services (ICDS) Scheme* (restructured in 2012), which offers a package of six services, including pre-school non-formal education and supplementary nutrition. Newly conceptualised *Rashtriya Avishkar Abhiyan* aims higher at nurturing

the spirit of inquiry, creativity and love for science and mathematics amongst students in the age group of 6–18 years. These schemes have redefined the role and responsibilities of teaching in emerging India.

IMPROVING TEACHING ENVIRONMENT

New scientific researches in paediatrics and child psychology have given better insights into the teaching-learning process. The cognitive research supports the idea that effective and meaningful learning should take place in an anxiety-free environment (Chugani, 1998). The students are more likely to retain newly learned information when the content is associated with strong positive emotion (Krashen, 1982). Brain imaging research establishes that when the topic is relevant and engaging, the students are more likely to comprehend and retain the new content (Willis, 2007). Studies indicate that humour and laughter in the classroom can enhance the overall learning process. It reduces stress and anxiety and increases self-esteem and self-motivation (Berk, 1998). Use of humour improves teacher–student communication and bonding. A teacher can spark students’ interest and curiosity through encouragement, praise and expressive instructions infused with sincere emotion. A positive emotional environment free from threats and a classroom having the comfort of free expression for students is an ideal setting for optimal learning.

Rewarding students depending on their involvement can also evoke motivation and learning process. However, a report released by the National Commission for Protection of Child Rights (2012), found that most of the students in the seven states surveyed received punishment in schools (*The Hindu*, 2012). Therefore, teachers’ responsibility is to adjust the classroom environment, make it enjoyable and exciting and promote their cause.

MANAGING STUDENTS AND CLASS

Know your Students

Each student is special, having a unique set of strengths and weaknesses. A teacher must be cognizant of the same. Basic understanding of the personality of a student and his/her motivation and learning style may help teacher in being effective. A study shows that the more specific a student’s goal, the more motivated that student is to attend class. A teacher must be aware of the three learning styles — audio, visual and tactile, and four language skills — reading, writing, speaking and listening, of students and their preferences and ensure that classroom instruction and activities accommodate these styles and competencies of learning. Teachers must aspire to provide individual attention and customised solution to the need of each student. Finland has developed an early detection mechanism based on periodic individualised assessments

of students by a group of teachers to help timely identification and necessary support to the struggling students before they start losing pace (*The Economist*, 2015a, 2015b).

Participatory Classes

Public schools invite students from varied educational, linguistic and socio-economic backgrounds. Students of most of the Indian schools as a product of teacher-centric classes — teacher instructs while the students sit and listen — are less used to the interactive classroom. While planning instruction for such a diverse/multilevel class, teachers may take into account the varied background and proficiency levels of their students. Since teachers have limited time and resources in the classroom for optimising the output of each student, they can innovatively engage students with themselves in different groups making the whole process fully participatory (Robert, 2007).

Psychological Care

All youngsters face psychological and mental health concerns from time to time. National Association of School Psychologists, Bethesda, USA, defines mental health not simply as the absence of mental illness, but in broader terms as the skills necessary to cope with life's challenges. The children face different challenges that can affect their learning and behaviour. They may be anything like academic difficulties, inability to adjust in class, the stress of

examination, problems with family or friends, worries of bullies, loneliness or rejection, disabilities, depression, suicidal thoughts, concerns about sexuality and alcohol and much more. If mental health is ignored, it can interfere with children's learning, development, relationships and physical health (APA, 2016). Children are remarkably resilient, but they thrive when they feel safe and supported. Parents and teachers need to create a support system to cater to the child's individual needs. The effective support systems include love and encouragement of family, the guidance of teachers and seniors on personal and social issues and better communication between home and school. In developed countries, there are psychologists/consultants to help families and schools deal with such crisis. Students are taught skills to solve conflicts and problems and develop coping strategies.

PREPARING STUDENTS FOR LIFE

According to E.G. Hubbard, the objective of a child's education is to make him able to develop further without the assistance of a teacher. The modern purpose of education is to establish the conditions needed for a person's development to ensure the realisation of her or his life objectives, taking into account the needs and conditions of society. Therefore, education needs to prepare an individual for life in all of its manifestations, serving also as a catalyst and tool for social

mobility and providing wider choices in different life events. An education system can only be reckoned trustworthy by society if it is capable of adapting to economic, political and social reforms taking place in the country through instilling knowledge and values needed by the population for their prosperity. Personality and skill development of students are one of the innate objectives of teaching which have a life-long impact on students. Simply offering praise to students goes a long way. Teachers tend to point out where students did wrong, but forget to let them know where they did well. It is necessary sometimes to take the focus away from their weakness and put on their strengths to boost their confidence.

ENHANCING PROFESSIONAL SKILLS

Education is purposeful. According to Peter Ducker, education is today the only real capital. The public education is one of the most important tools for the generation of capital for the country. India has so far been a country that values knowledge and intellect but not the

skills. Since skills are necessary for employment, the schools are required to emphasise skills and education equally.

As per an estimate, with the average age of population at around 29 years by 2020, India would be among the youngest in the world, and when the global economy would face a shortage of around 56 million youth, India will be the only country with a youth surplus of 47 million by 2022. There would be huge demand of skilled manpower by that time. However, India's formally skilled workforce is just 4.69 per cent. This number compares poorly with countries like South Korea and Japan (Table 4).

The findings that 'only a small proportion of Indian graduates are considered employable' and the incomparable figures on patents filed (2012) by India (18,173), China (5,61,377), Japan (4,88,744) and USA (2,68,782) are indications that our education lags in terms of global relevance and competitiveness. A report confirms the missing focus on research, culture and

Table 4
Skilled Workforce

Country	Skilled Workforce (%)
South Korea	96
Japan	80
Germany	75
UK	68
India	4.69

Source: National Policy on Skill Development and Entrepreneurship (GOI, 2015)

entrepreneurship in most of the institutions (FICCI-EY, 2014). The poor school education may not escape as one of the causes of this scenario.

The neighbouring China has emerged as manufacturing giant which shares 80 per cent air conditioners, 70 per cent mobiles and 60 per cent shoes of the global production alone. This has become possible only through steering secondary school students into formally skilled training programmes (*The Economist*, 2015a, 2015b). To get demographic dividends and to contribute to the global economy, the education system has to produce skilled and job-ready manpower with certified abilities.

LINKING SCHOOLS WITH COMMUNITY

Teaching is not the teacher's responsibility alone. Essentially, teaching is a social interaction of school and the community. Parents and teachers need to understand each other's strength and limitations to support each other in the process. New educational schemes are increasingly capitalising on this linkage. *Beti Bachao, Beti Padhao* scheme proposes to strengthen girls' education through incentivising School Management Committee for enrolment and retention of girl students. Likewise, *Swachh Bharat: Swachh Vidyalaya* scheme links hygiene with education. Mid Day Meal scheme is an example of improved mutual understanding between the school and the community for

fulfilling educational as well as nutritional needs. Finally, social approval of teaching job also finds reflection in the quality of teaching. In South Korea, teachers come from the top 5 per cent of school leavers. In Finland, teachers are paid modestly but treated well. In both the countries, teachers are respected a lot, and results are the world's best. The USA programme, *Teach for America* has successfully attracted the best persons in teaching and copied worldwide (*The Economist*, 2015a, 2015b).

TEACHERS AS SOCIO-EDUCATIONAL ENTREPRENEURS

A major part of the rural India presents difficult socio-economic perspectives and unique set of challenges. In this scenario, a teacher concerned only with pure educational practice cannot succeed. She/he needs to be a socio-educational entrepreneur to go beyond a narrowly defined educational practice through extra-educational interventions to achieve their educational goals. New age teachers have the responsibilities to understand school-community relations and find innovative solutions to various local challenges.

There are examples of educational leadership and innovative teachers who have devised unique solutions for shaping the difficult socio-economic frames in which they work. A joint publication of the Government of Gujarat and IIM, Ahmedabad

on innovative primary school teachers (GEIC, 2011) cites some examples where leader teachers have performed to overcome the existing limitations and became a source of inspiration to others. A few illustrations, in brief, are listed in Table 5.

NEW AGE APPROACH

The 21st century is radical not only in offering multiple opportunities but also in demanding new and different abilities. This demand requires

renewed attention to curriculum, teacher quality, and assessment as well as core skills like creativity and innovation, problem-solving and critical thinking, and communication and collaboration (Rotherham and Willingham, 2009). Development of such core skills would invariably require student-centric teaching approach based on problems and projects which allow students to collaborate, work on real problems, and engage with the community (Grayson, 2011). We need to develop

Table 5
Case Study on Challenges and Innovative Solutions by Teachers

S. No.	Role of Leader Teachers	Challenges	Success/Impacts
1.	Shankarbhai Sendhav (community building & socio-educational enterprises)	How to use students & teachers to improve education environment	Use of students and teacher trainees of National Service Scheme (NSS) in organising eye camps for social causes.
2.	Jitubhai Boricha (role of social reforms)	Motivating and bringing differently-abled children in the mainstream education	His endeavours and preparedness for education programmes helped fulfil his objective.
3.	Dharmesh Ramanuj (community development role)	Connecting school with the community	His “night group school” and “parents’ term” initiatives are the best examples of connecting with the community.
4.	Kailashben Patel (engaging public sector companies and cooperatives for helping the school)	Handling drunkenness among the students	Successful collaboration with public sector companies and cooperatives to reach an out-of-the-box solution.
5.	Rajeshkumar Sakariya (community development)	Seasonal migration of children	Attempted to address the problem through a residential camp.

Source: Gujarat Educational Innovations Commission, GoG (GEIC, 2011).

an advanced level of teaching as we do not yet know how to teach collaboration, creativity, innovation and passion in the same way we do say multiplications. Besides, we need solutions to provide high-quality learning opportunities to the masses, especially to the marginalised students. The technology having remarkable potential to improve and expand the quality and horizon of the education, needs to be explored as to how it could be implemented efficiently and cost-effectively.

KEEPING UPGRADED

A good teacher is always a student. Teachers are required to strive for quality and high standards within their profession and learn throughout life and develop new skills to be effective in their profession. Society has high expectations from them and depends on them. Therefore, teachers must be role models of what they advocate. The technological revolutions are gradually demanding teachers to relook the way they teach. With the change of society and job market, teachers are required to keep themselves updated and instill additional sets of skills in students to make them successful in life. While teachers cannot succeed with every child and avert every social ill, they are central to the hopes of building a better world. Whatever the problems, teaching is a wonderful vocation and a teacher may learn to enjoy his/her profession through constant self-upgradation.

CONCLUSION

The role of education in anybody's life is indisputable. Teachers are indispensable in preparing the new generation for the future. They provide the essential knowledge and skills through inculcating values, ethics, responsibility and rationality. A nation must strive for a 'meaningful access' to quality education which respects cultural diversity and promotes social cohesion. Education is strongest in those societies which revere their teachers and value public education systems. The strong and homogeneous public education is a guarantee of a harmonious society. The conducive physical and psychological teaching environment coupled with purposeful and suitably aligned educational goals not only equip students with social and livelihood skills, but also prepare them for the new world order. New scientific findings and technological achievements may enhance the efficiency and outreach of teaching. Besides broader institutional interventions, there are possibilities of several micro-level managements at the level of school, community and individual teacher, which can transform the experience and impact of teaching. There are exemplary acts of such teachers who have risen as social entrepreneurs and performed extraordinarily despite manifold limitations. The emerging India calls for such leader teachers to transform the lives of millions of children.

She/he needs to be deeply involved and take the lead in going beyond the existing educational frames through extra-educational interventions to achieve their educational goals. They may take it as a personal challenge and work towards fulfilling parental and community aspirations as well as achieve self-satisfaction through constant training, self-upgradation and better school–community cooperation.

REFERENCES

- APA. 2016. Children's Mental Health. American Psychological Association. Retrieved from: <http://www.apa.org/pi/families/children-mental-health.aspx>
- BERK, R.A. 1998. *Professors are from Mars, Students are from Snickers*. Madison, WI: Mendota Press.
- CENSUS OF INDIA 2011. Office of Registrar General of India.
- CHUGANI, H.T. 1998. *Biological Basis of Emotions: Brain Systems and Brain Development*. Paediatrics. Vol. 102. pp. 1225–1229.
- EdCIL (India) Limited. n.d. *Progress Overview of Research*. Sarva Shiksha Abhiyan. Retrieved from: http://ssa.nic.in/main_page
- FICCI-EY. 2014. *Higher Education in India: Moving towards Global Relevance and Competitiveness*. FICCI-EY Knowledge Paper.
- GEIC. 2011. *Learning from Innovative Primary School Teachers*. Gujarat Educational Innovations Commission, Government of Gujarat and Ravi J. Matthai Centre for Educational Innovation, IIM, Ahmedabad.
- GOVERNMENT OF INDIA. 2015. *National Policy on Skill Development and Entrepreneurship 2015*. Ministry of Skill Development and Entrepreneurship. Retrieved from: <http://www.skilldevelopment.gov.in/assets/images/Skill%20India/policy%20booklet-%20Final.pdf>
- GRAYSON, PATTI. 2011. *New Teachers: The Joys & Challenges of 21st Century*. Retrieved from: <http://plpnetwork.com/2011/09/01/new-teachers-the-joys-challenges-of-21st-century>
- KRASHEN, S. 1982. *Theory versus Practice in Language Training*. In R.W. Blair (Ed.), *Innovative Approaches to Language Teaching*. Rowley, MA: Newbury House.
- MHRD. 2014. Ministry of Human Resource and Development, Government of India. Retrieved from: http://mhrd.gov.in/sites/upload_files/mhrd/files/lu1716.pdf
- NCERT. 2014. *Report on Quality Interventions in Elementary Education*. Retrieved from: <http://www.ciet.nic.in/QMTs/PDF/QualityIntervention.pdf>
- NUEPA. 2014. *Education for All towards Quality with Equity India* (1st ed.). National University of Educational Planning and Administration (NUEPA), New Delhi, MHRD, Government of India and Ministry of Women and Child Development, Government of India.
- OECD (2014). *PISA 2012 Results in Focus. What 15-year-olds Know and What They can Do with What They Know*. Retrieved from www.oecd.org/pisa

- ROBERTH, M. 2007. Teaching in the multilevel classroom. Retrieved from: http://www.pearsonlongman.com/ae/download/adulted/multilevel_monograph.pdf
- ROTHERHAM, ANDREW J. AND DANIEL WILLINGHAM, 2009. 21st Century Skills: The Challenges Ahead Teaching for the 21st Century. *Educational Leadership*. Vol. 67. No.1. pp. 16–21. Retrieved from: <http://www.ascd.org/publications/educational-leadership/sept09/vol67/num01/21st-Century-Skills@-The-Challenges-Ahead.aspx>
- The Economist*. 2015a, Feb 14th ed.
- . 2015b, March 14th ed.
- The Hindu*. 2012. Lack of School Infrastructure Makes a Mockery of RTE (5th April 2012). Retrieved from: <http://www.thehindu.com/news/national/lack-of-school-infrastructure-makes-a-mockery-of-rte/article3281720.ece>
- TOI (*Times of India*) (2013, 2nd Jan). Retrieved from: <http://timesofindia.indiatimes.com/home/education/news/99-fail-test-for-school-teachers/articleshow/17848944.cms>
- UNESCO. 2012. *Opportunities Lost: The Impact of Grade Repetition and Early School Leaving, Global Education Digest 2012*. Retrieved from: www.uis.unesco.org/Education/Documents/ged-2012-en.pdf
- . 2013. UNESCO Institute for Statistics, November 2013. Retrieved from: <http://stats.uis.unesco.org>
- . 2014. *Wanted: Trained Teachers to Ensure Every Child's Right to Primary Education*. UNESCO Institute for Statistics (UIS) and the Education for All Global Monitoring Report.
- WILLIS, J. 2007. The Neuroscience of Joyful Education. *Educational Leadership*. ASCD. Vol. 64 (on line).
- WORLD BANK. 2013. World Development Indicators 2013. Retrieved from: <http://hdr.undp.org/en/content/expenditure-education-public-gdp#footnote>
- YADAV, S.K. 2011. A Comparative Study of Pre-Service Teacher Education Programme at Secondary Stage in Bangladesh, India, Pakistan and Sri Lanka. *Indian Educational Review*. Vol. 48. No.1.

Conflict and Education

Mapping the Field in Literature?

HABIBULLAH SHAH*

Abstract

The paper begins with the conceptualisation of the term 'conflict' for broader understanding of the field 'conflict and education'. How literature has reflected on education as a victim of conflict is the first argument of this paper. This is followed by another argument; how education creates and promotes conflict. Then the paper also thoroughly discusses the role of education as an ambassador for peace in conflict settings. Lastly, we argue for a new area of inquiry that is currently omitted and underdeveloped within the field and that is, how conflict can have positive impact on education. This area in the field of education and conflict seems to have the potential to create a new discourse among theorists and practitioners for future research. That we call as Post Conflict Educational Growth and Development.

INTRODUCTION

Conflict is an ineradicable part of the human condition (Copper, 2003). It is a very fluid, mobile and ambiguous term (Liban, 2006), which is often used interchangeably with violence, at the level of national and international politics (Bruck, Justino,

Verwimp and Avdeenko, 2010), and has been derived from a latin word 'confligere' which means to strike together (Barash and Webel, 2002). Wars and unrest are often described as conflicts (Doucet, 1997; WHO, 2015). Conflict can be seen from different perspectives, approaches

* Assistant Professor (Education), Directorate of Distance Education, University of Kashmir, Srinagar-190006.

and in different contexts; it can mean different things to different groups. For example, it can refer to a debate, a disagreement, argument, contest, dispute, or quarrel, a struggle, battle or confrontation, to a state of unrest, turmoil, chaos (Wall and Callister, 1995). All such terms can be used to explain conflict situations in different social settings from the inner emotional or psychological process of the individual relationships within or between different social groups such as family, village, town, state, culture, or even countries. But, a more global approach to conflict is violence, and conflict usually has negative connotations. Sociologists are of the opinion that conflict is something which is common, everyday occurrence of which is natural and unavoidable a social fact of which we all had direct experience (Fink, 1968; Wall and Callister, 1995). Doucet (1997, 2003) looked at conflict as an intricate social phenomenon which is a trait associated with the human existence that is essential for the survival of the society. He has conceptualised the conflict as:

“Conflict arises when parties disagree about the distribution of material or symbolic resources and act on the basis of these perceived incompatibilities. The definition emphasises that conflict is both perceptual and behavioral. Violence is only one form among a range of other possible ways of expressing conflict or engaging in conflict behaviour” (Doucet, 1997, p. 176).

Correspondingly, Agerback (1996) has reflected on conflict from dispute point of view. According to him:

“In the sense of dispute, conflict is of course universal in the politics of family, community and nation. In that sense, any dynamic human system is by nature a conflictive one, encompassing the play of opposing interests. The crux lies in how such conflict is managed. So long as the social and political processes provide channels for dialogue, participation and negotiation, conflict plays a constructive role. Where such channels are blocked, and yet basic needs go unmet, then resentment and desperation build up. The outcome is protest, repression and violence” (Agerback, 1996, p. 27).

Similarly, Sarah Dryden-Peterson, Faculty, School of Education at Harvard University and co-author of *Educating Children in Zones of Conflict: An Overview and Introduction*, defines conflict typically as any situation in which armed violence over government or territory emerges and disrupts the lives and livelihoods of citizens (Dryden-Peterson, 2011). It is a social fact that conflict has now become a global problem (Bhargava, 2006; Nigussie, 2014). It affects every aspect of human life and social institutions like education, health, structure, development and all that a human being requires on this planet for survival (Gallagher, 2004). History reveals that conflict is historical in nature and the roots

of conflict develop over many years and the post-effects of conflict can create an outcrop of instability (UNO, 2001). For this reason, the literature on conflict tends to define zones of conflict as not only situations where there is active armed violence, but also those that have been affected by armed conflict in the past (Mundy and Dryden-Peterson, 2011). Novelli and Cardozo (2008) advocated that armed conflict in the global context is changing in its symbolic structure and is now becoming characterised by cultural discrepancies. There are no signs that the world is becoming a less conflict place (Bhargava, 2006; Davies, 2004), especially children are at risk because of growing conflicts. The issue of conflict confronts to many countries, generates an encouraging growth of scholarship aimed at determining the effective delivery of education in conflict situations (Justino, 2014; Wharton and Oyelere, 2011). Armed conflicts too have an impact on the supply and demand of education (Shemyakina, 2011). Therefore it seems logical to study the relationship between conflict and education from various theoretical and disciplinary perspectives.

CONFLICT AND EDUCATION: A NEW EMERGING FIELD

The field of conflict and education is receiving increased attention within the media, in the academic field and from policymakers and practitioners (Justino, 2014; Paulson and Rappleye, 2007; Ishiyama and Breuning, 2012).

Yet, it remains a 'field in its infancy' (Barakat, Connolly, Hardman and Sundaram, 2013; Tomlinson and Benefield, 2005). This is reflected in the plethora of terms that have been used to describe this emerging field, including conflict and education, 'education for reconstruction', 'education in crisis situations', 'emergency education', 'education in fragile states', 'education and conflict', and 'education and instability' (Hilker, 2011; Karpinska, Yarrow, and Gough, 2007; Smith, 2005). But, the area is more represented by the terms like 'education and conflict' as well as 'conflict and education' in the literature. This budding field of study therefore runs across a wide range of contexts (Smith, 2005). The gap between theory and practice in the scholarship of education and conflict still remains a challenge (Bernardo and Baranovich, 2014). The literature available is too restricted to incorporate the 'wide range of experiences' of conflict that education has retained in conflict areas (Sommers, 2002, 2006). But now the trend has changed from the last decade especially after 11 September 2001, as there has been an alarming series of devastating and extremely publicised conflicts across the world (Masten and Narayan, 2012). A growing body of research is emerging about education and conflict over the last decade (Bush and Saltarelli, 2000; Davies, 2004; Paulson and Rappleye, 2007; Poirier, 2012; Mundy and Dryden-Peterson, 2011; Smith

and Vaux, 2003; Justino, 2014). Education in post-conflict transitions has become the focus of a growing body of research among researchers and educationists as it is seen as being critical to the reconstruction process and consolidating peace and stability (Bush and Saltarelli, 2000; Davies, 2004; Pigozzi, 1999; Kagawa, 2005; Paulson, 2011; Tomlinson and Benefield, 2005). However, the existing literature in this emerging field provides us with three interconnected analytical frameworks which describe the current relationships between education and conflict. In our conceptual model, we have attempted

to present these relationships and have also figured out where the gap lies. These relationships are as follows: (a) Education as victim of conflict, in other words, the multifarious impacts of conflict on education, (b) Complicit role of education in conflict, and (c) Role of education in peace building (Figure 1). But, there still exists another relationship between education and conflict about which literature is still silent. Our focus is to highlight that gap. Let us first elaborate these frameworks in order to have a broader understanding of the area and argue for new relationship in the field.

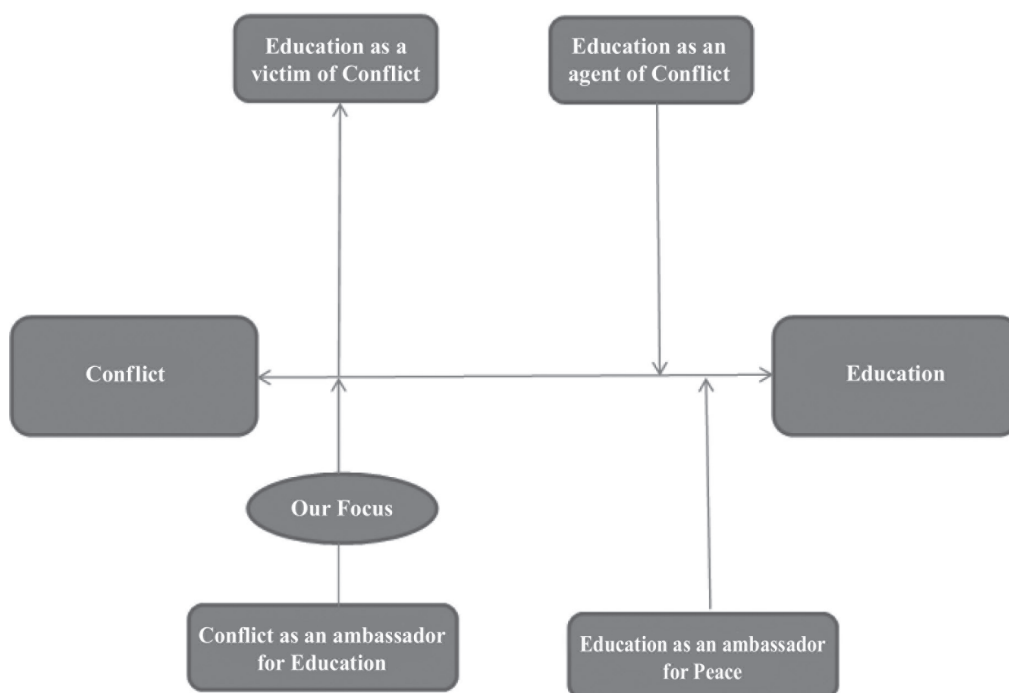


Figure 1. Conceptual Model

**CONCEPTUAL MODEL FOR
UNDERSTANDING RELATIONSHIP
BETWEEN CONFLICT AND EDUCATION**

A. Education as Victim of Conflict

It is now an established fact that armed conflict has the strong potential to have negative impact on every aspect of the human society especially education (Blattman, 2009; Stewart, Fitzgerald, and Associates, 2001). Generally, education becomes the first victim of conflict. Much has been written about the harmful effects of conflict on education. It is reported that 28 million children who are out of school still live in conflict-affected poor countries (Barakat *et al.*, 2013; UNSG, 2012; GPEE, 2012; UNESCO, 2011). Recently, there has been a shift to document this systematically through a series of UNESCO funded publications (O'Malley, 2007; UNESCO, 2010) that articulate the variety of ways in which education opportunities, actors and institutions can be negatively affected by conflict such as attacks on students and teachers, schools, sexual violence, forced entry into army. It destroys education infrastructure, reduces budget on education and prevents children from attending classes regularly (Justino, 2014; Wharton and Oyelere, 2011). Educational institutions are often a target for groups hostile to the government because of the association with state authority (UNDP, 2005). Conflict damages the institutions and process

of education as a result of which, intellectual as well as academic growth gets hampered. Armed conflicts have a very strong negative effect on schooling of children (Akresh and Walque, 2008). By and large, conflicts are trouble creators for mankind.

Conflict causes major harm and brings with it devastating consequences for a country, including casualties, displacement and the obliteration of public infrastructure especially educational institutions and human resource (Abdi, 1998; Buckland, 2005; Poirier, 2012). Presence of armed conflict often weakens the government's ability to offer education to its citizens (Amin and Naqshbandi, 2013; Bhargava, 2006). The impact of armed conflict on children and their education is both far-reaching and complex (Roger, 2002), and it gives birth to various psychological problems among children and adults. Conflict causes problems in harmonising academic calendar across war-affected regions (UNICEF, 2005), while educational institutions remain closed for an indefinite period of time (Bruck, 1997) and have a harmful socio-psychological impact on students' intellect (Sany, 2010).

Seitz (2004) identifies three different levels upon which conflict can affect education. Firstly, it affects children directly through the loss of parents, loss of relatives, physical violence, sexual assault, rape, need to leave home, recruitment

as child soldier, displacement, etc. Secondly, the damage caused by war and conflict have a direct negative effect on the process of schooling, in terms of the danger to get there, and also the economic situation might no longer allow children to enrol for schooling (Davies, 2004). Thirdly, educational infrastructure and institutions become targets and are destroyed for political reasons or sometimes accidentally. Children are more vulnerable to the impacts of armed conflict because of their crucial age period where they are still forming identities about themselves and their place within their families, the neighbourhood and the world in general (Narayan, 2002). Children in war-affected regions or armed-conflict zones get exposed to myriad vulnerabilities, threats and impairments, endangering their health and well-being (Rashid, 2012). Children are deprived of freedom; killed or orphaned; become targets of armed people; many are detained for months together; face torture and inhuman treatment at the hands of counter-insurgent agencies and bear the system's apathy (ACHR, 2010; Shakya, 2011). It has been universally accepted that armed conflicts bring long-living traumas with them for children (Janoff-Bulman, 1992), which not only affect psychological processes of children but also affect them biologically (Hajai, Chandrashekha, Raju, and Arora, 2005). Trauma can change the way children view their world (Monsen,

2002). All such problems proceed as barriers in their educational trajectories (Baker, Gardner, Chang, and Walker, 2009; Poirier, 2012; Peltonon and Punamaki, 2010).

Yet, worldwide a considerable number of children lack basic resources that can promise their healthy psychosocial development and these children are deprived of educational opportunities and safety due to armed conflicts. As cited earlier, more than 28 million children of primary school age group are out of school in conflict-affected countries. This is 42 per cent of the world's total out-of-school children population (UNESCO, 2011). Even in conflict-affected countries where considerable effort has been put for expanding access to primary education, reports reveal that primary school education achievements are still very low (Mundy and Dryden-Peterson, 2011). Conflict affects education in many contexts like it results in the death or displacement of teachers, staff and students (Dryden-Peterson, 2011; Justino, 2014).

According to the UN statistics, approximately two million children have been killed and six million seriously injured or permanently disabled in armed conflicts in the past decade across the conflict-affected countries (Marcal, 2003; World Bank, 2005). The negative consequences of wars, terrorism, military violence and poverty on children's psychosocial development and mental health are of great concern. Therefore,

effective interventions and strategies to reduce their emotional suffering and promote their mental health are considered one of the major global mental health challenges (UNICEF, 2004). Beyond the human costs and physical destruction, armed conflict is draining some of the world's poorest countries of financial resources. Instead of diverting their budgets towards productive investment in human capital through education, many countries are still wasting their money on unproductive military expenditure (UNESCO, 2011). All this discussion articulates the iniquitous and multifarious impacts of conflict on education and human resource.

B. Education as an Instrument for Conflict

The second major area of research inquiry is to explore the ways, education depending on its nature, content and delivery can be used as an instrument for conflict. This area in the field of education and conflict publicly got attention with the publication of *The Two Faces of Education* by Kenneth D. Bush and Diana Saltarelli in the year 2000. Bush and Saltarelli (2000) argued that how educational systems can be manipulated to drive a wedge between people, rather than drawing them closer together. Since education reflects the society around it, therefore attitudes that flourish beyond the school walls will, inevitably, filter into the classroom. Bush and Saltarelli (2000) provide a range of examples

of different forms of violence in education: the uneven distribution of education and educational opportunities, denial of education as a weapon of war, manipulation of history for political purposes; the manipulation of textbooks; education as a weapon of cultural repression; the conveying of images asserting superiority of one group over another and segregated education. Their publication paves the way for further critically informed research in the field. Similarly, a World Bank report (Buckland, 2005) advocates that “educational systems and schools, which are widely expected to play a role in mediating the relationship between ethnic and religious groups and so build ‘social capital’ at the same time often stand accused of deepening conflict among ethnic, religious, and other social groups” (Buckland, 2005, p. 9).

Similarly, Lynn Davies’ (2004) path-breaking work on education and conflict, complexity and chaos, demonstrates the multiple ways education can serve as a means of conflict through educational policies and practices that exclude minorities, exacerbate class and gender differences, and exclude students through a war or hate curriculum (Davies, 2004). Likewise, a number of research studies have also analysed the complex and multifaceted role of education in conflict settings (like Buckland, 2006; Gallagher, 2004; Smith and Vaux, 2003; Novelli and Lopez-Cardozo, 2008; Paulson, 2011)

and have advocated that education promotes conflict through a number of ways like curriculum, pedagogy, discrimination and through other school practices. Tawil and Harley (2004) state that the content of the curriculum affects education's ability to facilitate coexistence or fuel detestation. The literature has specifically focused on the structure and content of education systems, and on how they may reproduce and exacerbate conflict in different contexts (Davies, 2011; Gallagher, 2011; Paulson, 2011). Degu (2005) argues that education can contribute to the creation of widespread civil violence or the strengthening of existing conflict. Education systems are still used to transmit the ignorance, prejudice and social injustice that make societies less cohesive, more divided and, ultimately, more likely to descend into conflicts (UNESCO, 2011). Smith (2005) views education correspondingly as a 'political tool for ideological development' to generate conflict among academic circles. Education can in turn persuade situations of conflict — either contributing to violence or working for creating a philosophy for justification of violence and often fuel violence by providing insufficient or unequal access and/or the wrong type of education (Barakat *et al.*, 2013; Smith and Vaux, 2003; Davies, 2010; Hilker, 2011). To conclude, educational institutions are often part of the cycle of violence, but they have the potential to break and

reverse that cycle (UNESCO, 2011; Winthrop and Jackie, 2008).

C. Education as an Instrument for Peace

It is an accepted fact that education has potential for promoting peace for mankind (Winthrop and Jackie, 2008). Education leads to citizenship, creates various options and provides a path to development and is a primary vehicle by which children can lift themselves out of conflict situations and obtain the means to participate in various development programmes (Manuchehr, 2011). There are a number of research studies that reveal the power of education as a means for peaceful co-existence in conflict situations. Education is an instrument for peace-building, child protection, human rights promotion, defense and protection of democracy in the conflict zones (Bekerman and McGlynn, 2007; Kaur, 2006; McGlynn, 2009; Novelli, 2010; Pheralia and Garratt, 2014; Uwazie, 2003). Education is robust instrument for creating peace and non-violent ideologies in conflict areas. Perhaps more than in any other sector, education provides many visible peace dividends which play a vital role for the survival of peace agreements. Davies (2004) argues that educational institutions have been resilient to the challenges posed by conflict like in countries such as Lebanon, Nepal, Uganda, Bosnia and Liberia. Bush and Saltarelli (2000) in their work argue that the positive face

of education goes beyond the provision of education for peace programmes, reflecting the cumulative benefits of the provision of quality education. These include the conflict-dampening impact of educational opportunity, the nurturing of ethnic tolerance, the inclusion of linguistic diversity and the ‘disarming’ of history. Likewise, Novelli (2010) opined that much of the literature focuses narrowly on ‘the two faces of education’ — namely, that education can prevent war but also foster violent conflict, and education as good for trade, and consequently neglect the complex relationships between education and peace, especially how education will act as foundation for peace. Education has universal bent for promotion of brotherhood and peace (Dupuy, 2010). Educational institutions can be used to provide a safe space and sense of normality during times of conflict and can contribute to the physical, psychosocial and cognitive protection of children, adolescents and young learners (Barakat *et al.*, 2013). In conflict places, education works for peace-building and reconciliation as it helps in shaping new attitudes, behaviours and build a new social capital (Winthrop and Jackie, 2008). In this way, education can contribute towards reducing inequalities, overcoming prejudices and building new social values and institutions in the conflict zones (Save the Children, 2013). Burde (2014) advocates that establishment and maintenance of community-

based elementary schools in conflict-affected countries like Afghanistan will serve as a means to provide education for all and will ensure peace in the society. Brannely, Ndarhutse and Rigaud (2009) have marvelously outlined that:

“Education is also increasingly perceived as a key factor is restoring normalcy and hope, a necessity that can be both life-sustaining and life-saving, providing physical, psychosocial and cognitive protection” (Brannely *et al.*, 2009, p. 33).

This paradigmatic shift in conflict management and resolution, which accompanied the emergence of peace building programmes, is documented in a number of UN documents such as *An Agenda for Peace* (1992) and the *Brahimi Report* (2000). The term ‘peace building’ was in use among scholars and practitioners of conflict transformation since the early 1970s, and it was popularised by Johan Galtung (1976) in his popular work, *Three Approaches to Peace: Peacekeeping, Peacemaking, and Peace building*. According to him, peace-building seeks to address and overcome structural contradictions that lie at the root of conflict. Central theme in Galtung’s (1976) work is the search for positive peace, which has a relevance for addressing and overcoming issues of structural and cultural violence, as well as the exploration for human solidarity, empathy and social justice (Galtung, 1976). All this can be achieved through education (Burde, 2014).

However, in more recent years several international organisations have examined the potential contribution that education can make to peace. In this regard, UNESCO (2011) has called for a joint effort to unlock “the full potential of education to act as a force for peace”. Alike, World Bank (2005) also outlined the role of education for peace as:

“Educational programming in post-conflict societies cannot be business as usual. Education has a critical role to play in the wider reconstruction of the society, from building peace and social cohesion to facilitating economic recovery and getting the country onto an accelerated development track” (World Bank, 2005, p. 27).

This is testified by various policy reports of UNICEF (2011), UNESCO (2011), Save the Children (2013), World Bank (2005), and many other organisations. Various international and local organisations are working for promoting peace through education across various conflict zones of the world and are deeply committed to developing and implementing educational projects that promote awareness about human rights, tolerance, child rights, humanitarian law, peaceful resolution of disputes and final conflict management. Educational institutions like schools can be used as a space for creating the peace and resolve the conflict for the welfare of humankind. London (2007) writes:

“Out of school, one is exposed to all manners of perils, the same perils that

face grown-ups, and one must usually face these perils alone. In school, however, a child can sit and play; can spend time with other children and not have to do any of the labour that comes outside the schoolhouse walls. One’s only job in school is to learn. Children in school socialise; they feel like part of a community, a feeling that is all too scarce during times of war” (London, 2007, p. 32).

Briefly speaking, education is an ambassador of peace and can act as a solvent for removing the social evils and inequalities which emerge in conflict zones. Education works as a source of inspiration and ray of hope during war-like situations and is a gateway for the socio-economic development of people living in conflict regions.

A NEW PERSPECTIVE: POSITIVE IMPACT OF CONFLICT ON EDUCATION?

The thing which does not kill you makes you strong, as advocated by Nietzsche (1955), is the ontological foundation of my argument. Each setback teaches us a new facet of life and compels us to rethink our goals, aspirations and reorient our paths (Kalam, 2013; Khan, 2012; Sternberg, 2014). There is another side of the situation which is still unexplored and hidden in the literature of education and conflict. Do conflicts have some positive impact on education? The dictum seems against the common sense but literature has given some indications that conflict can also have some

positive aspects for education and society. In the article, 'Experiences of Children in Armed Conflict in Nepal', Shakya (2011) writes:

"Children faced many difficulties and have experienced some positive changes. One visible positive impact on children is they have become articulate, self-confident and conscious of their rights. They have learned to question tradition, culture and authority. They are expressive and articulate in explaining their ideas and views. Furthermore, they are confident to talk to individuals, masses or outsiders. Even girls are not shy or timid as in the past. They are forthcoming and helpful. Girls and young women are ready to take leadership roles. Travel to different parts of the country exposed many of them to human and geographical diversity and changed their worldview, whereas usually they would have been limited to their villages and their communities. They did not have opportunities to deal and interact with diverse groups of people, which they later got with the start of the conflict" (Shakya, 2011, p. 560)

Similarly, from India, in the trouble-torn state of Jammu & Kashmir around 1990s, there was suddenly an increase in terms of enrolment at school level (Parlow, 2013). There is a good reason for that. People realised that future of our children will only depend on education, therefore mass opinion build up was towards education. Despite the effects of violence perpetration and trauma, children

are also resilient and have tendency to continue their educational trajectory (Sommers, 2006; Betancourt and Khan, 2008) and for young people in most conflict-affected countries, resuming their education is the primary means of supporting resiliency and encouraging positive reintegration into society (Davies, 2010; Zuilkowski and Betancourt, 2014). Similarly, Felman and Laub (1992) ask:

"Is there a relationship between crisis and the very enterprise of education? To put the question even more audaciously and sharply: Is there a relation between trauma and pedagogy? In a post-traumatic century, a century that has survived unthinkable historical catastrophes, is there anything that we have learned or that we should learn about education that we did not know before? Can trauma instruct pedagogy, and can pedagogy shed light on the mystery of trauma?" (Felman and Laub, 1992).

What do these lines reveal? Conflicts and traumas are able to develop positive changes among human beings and such a theme is old in the literature. Certain questions also arise which require research attention and investigation. Do the traumas have some positive aspects for education also? Do conflicts bring some positive changes among the outlook of citizens towards education? Do conflicts help to reshape and rebuild our educational structure better than the previous one? Do conflicts help in the enrolment of

children in schools? These questions are still unexplored empirically in the literature. On the side, creating meanings and development out of adversity and traumatic situations is now psychological reality. Because theoretically it has been proved as in the year 1995 when Calhoun and Tedeschi developed the theory Post-Traumatic Growth in the area of psychology advocating that positive change out of traumatic situations is universally possible. The concept has been studied across various domains but it is still unexplored in the field of education and conflict. I believe that it is time to disseminate the new terms like Post-Conflict Educational Growth, Post-Conflict Educational Development, and Post-Traumatic Academic Growth with proper conceptualisations and theoretical trajectory for advocating a new debate in the area that conflict and traumas can have positive impact on education. I call researchers throughout the globe to investigate this idea across various conflict societies by conducting empirical and qualitative studies.

CONCLUSION

Increasingly, education is acknowledged as one of the best investments states can make for promoting peace and minimising conflict (Burde, 2014). Education is the primary vehicle by which children can lift themselves out of conflict, poverty, exclusion and gain the means to participate fully in their communities

(Burde, 2014; Manuchehr, 2011). It has been universally accepted that education is an efficient means to promote reconciliation and peace. Education has been declared as the fourth pillar of humanitarian response (Machel, 2001). Overall, the discourse recognises that armed conflict, war, turmoil and unrest are seen as the greatest obstacles to human development. Unfortunately, huge challenges have to be overcome to run the education systems in countries at war or in post-conflict situations because education has to respond to diverse educational concerns in very different social and political settings. Education in a conflict zone has to address all the aspects of the society for peace-making and peace-building and take into consideration all the positive as well as negative challenges which conflict has put before us. There is a need to conduct more research and evaluation to understand the complex and critical processes of education in relation to conflict, especially at the local level from the conflict-affected areas (Brown, 2011; Harber, 2004; Davies, 2004; Mundy and Dryden-Peterson, 2011). Policymakers emphasise that education heals the psychosocial wounds of war, promotes social inclusion, resolves unemployment crises, delivers democracy, builds peace and promotes economic and social development among people of affected areas (Buckland, 2006; Ishiyama and Breuning, 2012), that is why children

too have strong aspirations for future education in such places. Education policies should be designed in such a way that peace should be given a chance to get rebirth in the conflict zone and textbooks should be designed accordingly. Just focusing on structure and buildings will not be sufficient for education. Education has to be the ambassador of peace

for the entire society both living and non-living creations. Gallagher (2004) has beautifully argued in his book, “..... does not, in itself, solve all the problems of a divided society a more proactive approach is not only needed, but arguably the problems of a divided society will only be addressed if they are constantly and explicitly addressed”.

REFERENCES

- ABDI, A.A. 1998. Education in Somalia: History, Destruction, and Calls for Reconstruction. *Comparative Education*. Vol. 34. No. 3. pp. 327–40.
- ACHR. 2010. *Indian Human Rights Report Quarterly No. 2*. New Delhi: Asian Centre for Human Rights.
- AGERBACK, L. 1996. Breaking the Cycle of Violence: Doing Development in Situations of Conflict. In D. Eade (Ed.), *Development in States of War*. Oxford: Oxfam Press.
- AKRESH, R. AND D. WALQUE. 2008. *Armed Conflict and Schooling: Evidence from the 1994 Rwandan Genocide*. Germany: The Institute for the Study of Labor (IZA).
- AMIN, W. AND M.M. NAQSHBANDI. 2013. Youth and Armed Conflict: An Analysis faced by Youths of Kashmir. *Wedpecker Journal of Sociology and Anthropology*. Vol. 1. No. 1. pp. 5–11.
- BAKER, H., J.M. GARDNER, S. CHANG, AND S. WALKER. 2009. Experiences of Violence and Deficits in Academic Achievement among Urban Primary School Children in Jamaica. *Child Abuse and Neglect*. Vol. 33. pp. 296–306.
- BARAKAT, S., D. CONNOLLY, F. HARDMAN, AND V. SUNDARAM. 2013. The Role of Basic Education in Post-conflict Recovery. *Comparative Education*. Vol. 49. No. 2. pp. 124–42.
- BARASH, D.P. AND C.P. WEBEL. 2002. *Peace and Conflict Studies*. London: Sage Publications.
- BEKERMAN, Z. AND C. MCGLYNN. 2007. *Addressing Ethnic Conflict through Peace Education: International Perspectives*. Basingstoke: Palgrave Macmillan.
- BERNARDO, M.A.C. AND D. BARANOVICH. 2014. Higher Education in the Heart of Armed Conflict: The Pivotal Role of Student Affairs. *International Journal of Educational Development*. Vol. 35. No. 2. pp. 78–85.
- BETANCOURT, T.S. AND K.T. KHAN. 2008. The Mental Health of Children Affected by Armed Conflict: Protective Processes and Pathways to Resilience. *International Review of Psychiatry*. Vol. 20. No. 3. pp. 317–28.
- BHARGAVA, V. 2006. *Global Issues for Global Citizens: An Introduction to Key Development Challenges*. Washington, DC: World Bank. Available at: <https://openknowledge.worldbank.org/handle/10986/7194>

- BLATTMAN, C. 2009. From Violence to Voting: War and Political Participation in Uganda. *American Political Science Review*. Vol. 103. No. 2. p. 231.
- BRANNELY, L., N. Ndarhutse, and C. RIGAUD. 2009. *Donors Engagement: Supporting Education in Fragile and Conflict-Affected States*. Report Published by Save the Children, India.
- BROWN, G.K. 2011. The Influence of Education on Violent Conflict and Peace: Inequality, Opportunity and the Management of Diversity. *Prospects*. Vol. 41. pp. 191–204.
- BRUCK, T. 1997. Macroeconomic Effects of the War in Mozambique. *QEH Working Paper Series*. Queen Elizabeth House: University of Oxford International Development Centre, December.
- BRUCK, T., P. JUSTINO, P. VERWIMP, AND A. AVDEENKO. 2010. *Identifying Conflict and Violence in Micro-level Surveys*. Germany: IZA Group.
- BUCKLAND, P. 2005. *Reshaping the Future: Education and Post-conflict Reconstruction*. Washington D.C. The World Bank.
- . 2006. Post-conflict Education: Time for a Reality Check? In *Forged Migration Review Supplement Education and Conflict Research Policy and Practices*. Oxford University Press.
- BURDE, D. 2014. *Schools for Conflict or for Peace in Afghanistan*. New York: Columbia University Press.
- BUSH, K. AND D. SALTARELLI. 2000. *The Two Faces of Education in Ethnic Conflict: Towards a Peace Building Education for Children*. Florence: UNICEF.
- COPPER, H.H. 2003. What Is Conflict? *Journal of Police Crisis Negotiations*. Vol. 3. No. 1. pp. 85–100. DOI: 10.1300/J173v03n01_06
- DAVIES, L. 2004. *Education and Conflict, Complexity and Chaos*. London: Routledge Press.
- . 2010. The Different Faces of Education in Conflict. *Development*. Vol. 53. No. 4. pp. 491–97.
- . 2011. Conflict, Education and Democracy: Learning the Power of Dissent. *Conflict and Education*. Vol.1 No. 1. pp.1–4
- DEGU, W.A. 2005. *Reforming Education*. In Gerd Junne and Willemijn Verkorens (Eds.), *Post-conflict Development: Meeting New Challenges*. Boulder: Lynne Rienner Publishers.
- DOUCET, I. 1997. Conflict Transformation, Medicine. *Conflict and Survival*. Vol. 13. No. 3. pp. 175–94.
- . 2003. *Thinking about Conflict: Resource Pack for Conflict Transformation*. Section 2 of International Alert (IA). London: Process and Planning.
- DRYDEN-PETERSON, S. 2011. Conflict, Education and Displacement. *Conflict and Education*. Vol. 1. No. 1. pp. 1–5.
- . 2016. Refugee Education in Countries of First Asylum: Breaking Open the Black Box of Pre-resettlement Experiences. *Theory and Research in Education*. Vol. 14. No. 1. pp. 1–30. DOI: 1477878515622703
- DUFFIELD, M. 2001. *Global Governance and the New Words: The Merging of Development and Security*. London: ZED Books.

- DUPUY, K. 2010. *Education for Peace Building Peace and Transforming Armed Conflict Through Education Systems*. Norway: Save the Children.
- FELMAN, S. AND D. LAUB. 1992. *Testimony: Crises of Witnessing in Literature, Psychoanalysis, and History*. London: Routledge.
- FINK, C.F. 1968. Some Conceptual Difficulties in the Theory of Social Conflict. *The Journal of Conflict Resolution*. Vol. 12. No. 4. pp. 412–60.
- GALLAGHER, T. 2004. *Education in Divided Societies*. New York: Palgrave Macmillan.
- . 2011. Conflict, Education and Ethnicity. Dealing with Division and Cohesion through Education. *Journal of Conflict and Education*. Vol. 1. No. 1. pp. 1–4.
- GALTUNG, J. 1976. Three Approaches to Peace: Peacekeeping, Peacemaking, and Peacebuilding. In *Peace, War and Defense: Essays in Peace Research*. Oslo: International Peace Research Institute.
- GLOBAL PARTNERSHIP FOR EDUCATION AND ETHNICITY. 2012. *Education Cannot Wait: Children and Youth in Humanitarian Emergencies and Conflict Areas have a Right to Education*. New York: GPE.
- HAJAI, M.M., N. CHANDRASHEKHA, U. RAJU, AND P. ARORA. 2005. Terrorism, Trauma and Children. *Medical Journal Armed Forces India*. Vol. 61. No. 4. pp. 214–309.
- HARBER, C. 2004. *Schooling as Violence*. London: Routledge.
- HILKER, L.M. 2011. The Role of Education in Driving Conflict and Building Peace: The Case of Rwanda. *Prospects*. Vol. 41. pp. 267–82.
- ISHIYAMA, J. AND M. Breuning, 2012. Educational Access and Peace Duration in Post-conflict Countries. *International Interactions*. Vol. 38. pp. 58–78.
- JANOFF-BULMAN, R. 1992. *Shattered Assumptions: Towards a New Psychology of Trauma*. New York: The Free Press.
- JUSTINO, P. 2014. Barriers to Education in Conflict-affected Countries and Policy Opportunities. Paper commissioned for Fixing the Broken Promise of Education for All: Findings from the Global Initiative on Out-of-School Children (UIS/UNICEF, 2015). Montreal: UNESCO Institute for Statistics (UIS).
- KAGAWA, F. 2005. Emergency Education: A Critical Review of the Field. *Comparative Education*. Vol. 41. No. 4. pp. 487–503.
- KALAM, A.P.J. 2013. *My Journey*. New Delhi: Rupa Publications.
- KARPINSKA, Z. E., R. YARROW, AND L.M. GOUGH. 2007. Education and Instability: Avoiding the Policy–practice Gap in an Emerging Field. *Research in Comparative and International Education*. Vol. 2. No. 3. pp. 242–51.
- KAUR, B. 2006. *Peace Education: New Trends and Innovations*. New Delhi: Deep and Deep Publications.
- KHAN, M.W. 2012. *Wisdom*. New Delhi: Good Word Press.
- LIBAN, M.O. 2006. Local Conflicts between Somali and Oromo People in the Context of Political Decentralization in Ethiopia: Comparative Case Study on Ma’eso and Babile Districts. Unpublished Masters Dissertation submitted to Institute of Social Studies, The Hague, Netherlands.
- LONDON, C. 2007. *One Day the Soldiers Came*. New York: Harper Collins Publishers.

- MACHEL, G. 2001. *The Impact of War on Children*. Vancouver: UBC Press.
- MANUCHEHR, T.N. 2011. Education Right of Children during War and Armed Conflicts. *Procedia Social and Behavioral Sciences*. Vol. 15. pp. 302–05.
- MARCAL, G. 2003. *Impact of Armed Conflict on Children: A Review of Progress since 1996*. United Nations Report on the Impact of Armed Conflict on Children. New York: UNICEF.
- MASTER, A.S. AND A. NARAYAN. 2012. Child Development in the Context of Disaster, War and Terrorism: Pathways of Risk and Resilience. *Annual Review of Psychology*. Vol. 63. pp. 227–57.
- MCGLYNN, C. 2009. *Peace Education in Conflict and Post-conflict Societies: Comparative Perspectives*. Basingstoke: Palgrave Macmillan.
- MONSEN, R.B. 2002. Children and Terror. *Journal of Pediatric Nurturing*. Vol. 17. No. 1. pp. 62–63.
- MUNDY, K. AND S. DRYDEN-PETERSON. 2011. Educating Children in Zones of Conflict: An Overview and Introduction. In K. Mundy and S. Dryden-Peterson (Eds.), *Educating Children in Conflict Zones: Research, Policy, and Practice for Systemic Change, A Tribute to Jackie Kirk* (pp.1–12). New York: Teachers College Press.
- NARAYAN, G. 2002. *Children Affected by Armed Conflict: Programming Framework*. Canada: Canadian International Development Agency (CIDA).
- NIETZSCHE, F. 1955. *Beyond Good and Evil*. Chicago: Henry Regnery Publishers.
- NIGUSSIE, Y. 2014. The Constructive and Destructive Impacts of Education on Conflict. *Asian Journal of Multidisciplinary Studies*. Vol. 2. No. 1. pp. 1–5.
- NOVELLI, M. 2010. Education, Conflict and Social (in) Justice: Insights from Colombia. *Educational Review*. Vol. 62. No. 3. pp. 271–85.
- NOVELLI, M. AND L. CARDOZO. 2008. Conflict, Education and Global South: New Critical Directions. *International Journal of Educational Development*. Vol. 28. No. 1. pp. 473–88.
- O'MALLEY, B. 2007. *Education under Attack*. Paris: UNESCO.
- PARLOW, A. 2013. Education and Armed Conflict: The Kashmir Insurgency in the Nineties. Retrieved from: https://pantherfile.uwm.edu/aparlow/www/education_may2013.pdf
- PAULSON, J. 2011. *Education, Conflict and Development*. Oxford: Symposium Books.
- PAULSON, J. AND J. RAPPLEYE. 2007. Education and Conflict: Essay Review. *International Journal of Educational Development*. Vol. 27. No. 3. pp. 340–47.
- PELTONON, K. AND R. PUNAMAKI. 2010. Preventive Interventions among Children Exposed to Trauma of Armed Conflict: A Literature Review. *Aggressive Behavior*. Vol. 36. No. 1. pp. 95–116.
- IPHERALIA, T. AND D. GARRATT. 2014. Post-conflict Identity Crisis in Nepal: Implications for Educational Reforms. *International Journal of Educational Development*. Vol. 34. No. 1. pp. 42–50.
- PIGOZZI, M. 1999. *Education in Emergencies and for Reconstruction: A Developmental Approach*. New York: UNICEF.
- POIRIER, T. 2012. The Effects of Armed Conflict on Schooling in Sub-Saharan Africa. *International Journal of Educational Development*. Vol. 32. No. 1. pp. 341–35.

- RASHID, J. 2012. An Analysis of Self-accounts of Children in Conflict with Law in Kashmir; Concerning the Impact of Torture and Detention on their Lives. *International Social Work*. Vol. 55. No. 5. pp. 629–44.
- ROGER, I. 2002. *Education for Children during Armed Conflicts and Post-Conflict Reconstruction*. Disarmament Forum: Children and Security, 45–50. United Nations Institute for Disarmament Research.
- SANY, J. 2010. *USIP Special Report*. New York: United States Institute of Peace. Available at: http://www.usip.org/files/resources/SR235Sany_final_lowres-1.pdf
- SAVE THE CHILDREN. 2013. *Results for Children: Annual Review*. Washington: Save the Children.
- SEITZ, K. 2004. *Education and Conflict: The Role of Education in the Creation, Prevention and Resolution of Societal Crises — Consequences for Development Cooperation*. German: German Technical Cooperation.
- SHAKYA, A. 2011. Experiences of Children in Armed Conflict in Nepal. *Children and Youth Services Review*. Vol. 33. No. 4. pp. 557–63.
- SHEMYAKINA, O. 2011. The Effect of Armed Conflict on Accumulation of Schooling: Results from Tajikistan. *Journal of Development Economics*. Vol. 95. No. 2. pp. 186–200.
- SMITH, A. 2005. Education in the Twenty-first Century: Conflict, Reconstruction and Reconciliation. *Compare: A Journal of Comparative and International Education*. Vol. 35. No. 4. pp. 373–91.
- SMITH, A. AND T. VAUX. 2003. *Education, Conflict and International Development*. London: DFID.
- SOMMERS, M. 2002. *Children, Education and War: Reaching Education for All (EFA) Objectives in Countries Affected by Conflict*. Washington DC: World Bank.
- . 2006. *Youth and Conflict: A Brief Review of Available Literature*. Washington, DC: USAID.
- STERNBERG, R.J. 2014. I Study What I Stink At: Lessons Learned from a Career in Psychology. *Annual Review of Psychology*. Vol. 65. pp. 1–16.
- STEWART, F., V. FITZGERALD, AND ASSOCIATES. 2001. *War and Underdevelopment. Volume 1: The Economic and Social Consequences of Conflict*. Oxford: Oxford University Press.
- TAWIL, S. AND A. HARLEY. 2004. *Education, Conflict and Social Cohesion*. Geneva: UNESCO International Bureau of Education.
- TEDESCHI, R.G. AND L.G. CALHOUN. 1995. *Trauma and Transformation: Growing in the Aftermath of Suffering*. Thousand Oaks, CA: Sage Publications.
- . 1996. Post-traumatic Growth Inventory: Measuring the Positive Legacy of Trauma. *Journal of Traumatic Stress*. Vol. 9. pp. 455–71.
- TOMLINSON, K. AND P. BENEFIELD. 2005. *Education and Conflict: Research and Research Possibilities*. Slough: National Foundation for Educational Research.
- UNDP. 2005. *Human Development Report: International Cooperation at a Crossroads*. New York: UNDP.
- UNESCO. 2010. *Protecting Education from Attack: A State-of-the-art Review*. Paris: UNESCO.

- . 2011. *The Hidden Crisis: Armed Conflict and Education, EFA Global Monitoring Report*. France: UNESCO.
- . 2004. *State of the World's Children*. New York: Oxford University Press.
- . 2005. *The State of the World's Children*. New York: The United Nations Children's Fund.
- UNITED NATIONS SECRETARY-GENERAL (UNSG). 2012. *Education First: An Initiative of the United Nations Secretary-General*. New York: UNSG.
- UWAZIE, E.E. 2003. *Conflict Resolution and Peace Education in Africa*. Lanham, MD: Lexington.
- WALL, J.A. AND R.R. CALLISTER. 1995. Conflict and its Management. *Journal of Management*. Vol. 21. pp. 515–25. DOI: 10.1177/014920639502100306.
- WHARTON, K. AND R.U. OYELERE. 2011. *Conflict and its Impact on Educational Accumulation and Enrollment in Colombia: What We Can Learn from Recent IDPs*. Germany: IZA Group.
- WHO. 2015. *War and Conflict: A Report*. Geneva: World Health Organization.
- WINTHROP, R. AND K. JACKIE. 2008. Learning for a Bright Future: Schooling, Armed Conflict and Children's Well-being. *Comparative Education Review*. Vol. 54. No. 2. pp. 639–61.
- WORLD BANK. 2005. *Reshaping the Future: Education and Post Conflict Reconstruction*. Washington, DC: World Bank.
- ZUILKOWSKI, S.S. AND T.S. BETANCOURT. 2014. School Persistence in the Wake of War: Wartime Experiences, Reintegration Supports, and Dropout in Sierra Leone. *Comparative Education Review*. Vol. 58. No. 3.

Impact of Socio-economic Status on Language Learning Motivation of Secondary School Students

RAJNI SINGH* AND SANJIV KUMAR CHOUDHARY**

Abstract

Many social factors are likely to affect the affective factors such as motivation indirectly affecting the learning of English as a second or foreign language. This study examined the influence of Socio-economic Status (SES) on students' Language Learning Motivation (LLM). We conducted a survey by using questionnaire to collect information about SES of the students and motivation. The respondents were students of secondary schools (Class X) affiliated to Central Board of Secondary Education. The data analyses were done using SPSS by descriptive statistics, ANOVA and simple linear regression. SES comprises fathers' education, mothers' education, fathers' occupation, mothers' occupation and family income. LLM construct included integrativeness and attitude towards learning situation developed by Gardner (1985). The reliability of the questionnaire for SES and LLM was found to be $\alpha=0.735$ and $\alpha=0.608$ respectively. Results indicated that there is a significant relationship between SES and language learning motivation which reflects that increase in social status leads to increase in language learning motivation.

* *Research Scholar*, Department of Humanities and Social Sciences, Birla Institute of Technology and Science, Pilani (Jhunjhunu)-333031, Rajasthan.

** *Associate Professor*, Department of Humanities and Social Sciences, Birla Institute of Technology and Science, Pilani (Jhunjhunu)- 333031, Rajasthan.

INTRODUCTION

With the dawn of the technological age, importance of English language proficiency has gained more attention in recent years. It has become one of the most-used languages across the world. Globalisation and the introduction of e-commerce have reinforced the status and use of English as the *lingua franca* in international business communication (Seidlhofer, 2005). After this new status of the English language as a *lingua franca*, the number of people who used English for communicative purposes, even though none of them is a native speaker of English, has increased considerably (Graddol, 2006). Along with India, Nigeria, Philippines, Germany, France, Pakistan, Italy, Japan, Netherlands and South Africa are the other countries where English is a Second Language (L2) (Casey, n.d). Although the World Bank has no official language of the institution, English is its working language (Cisse, Menon, Marie-Claire, and Nmehielle, 2014, p. 431), which again establishes the dominance of English at a wider level. Scrase (2002), in his study, found that English language proficiency in a globalising India is an essential component of one's cultural baggage, a resource that can eventually open doors into the world of professional employment in India and abroad. India is the largest English speaking community outside USA and the UK (Bhandari, 2009). Consequently, English holds a consolidated position of a second language (L2) in India.

Wilson and Komba (2012) have found that there is a positive connection between English language proficiency and academic achievement. Another study examined the relationship between English proficiency and mathematics scores and it revealed English proficiency as a significant predictor of mathematics scores (Henry, Nistor, and Baltas, 2014). There are many other studies which have also studied English as a predictor in the achievement of different subjects at school level as well as at college level (Fakeye, 2014; Stephen, Welman, and Jordaan, 2004). For effective learning of English as a second language (ESL), several measures have been suggested by the researchers. Various factors like socio-demographic and socio-psychological variables influence learning English (Oxford, 1990). Researchers have found that socio-economic status (SES) gap is the main cause of inequality among students in schools and other educational systems (Cornoy, 2007; Shavit and Blossfeld, 1993). SES, however, does not only affect the language learning outcomes but also has an influence on their language learning motivation (Kormos and Kiddle, 2013). All these studies reflect that SES and motivation do not only affect language learning outcome individually but also has an impact and relate among each other.

Language is a multifaceted phenomenon, and hence involves complexities in its acquisition.

This view is supported by Atkinson (2011), where he says, “If language is many things, then so is its acquisition”. Though many theories have been proposed for second language acquisition (SLA), Ellis (1997, p. 87) assumes that SLA has been essentially a psycho-linguistic enterprise. Literature suggests that socio-psychological variables are associated with second language learning (Yazigy, 2015; Bernard, 2010; Cortes, 2002; Gardner, 2001). Motivation has been widely accepted by both teachers and researchers as one of the key factors that influence the rate and success of second/foreign language (L2) learning (Dörnyei, 1998). It provides the primary impetus to learn the second language. Motivation has been defined in various terms. Dörnyei (1998) stated that motivation is a key to learning. It is an inner source, desire, emotion, reason, need, impulse or purpose that moves a person to a particular action. Gardner and Lambert made a distinction between orientation and motivation. Accordingly, orientation refers to the purpose of learning a second language, which can be integrative or instrumental. Brown (2000) asserts that studies of motivation of second/foreign language learners often refer to a distinction between two types of motivation namely, instrumental *versus* integrative motivation. A learner is instrumentally motivated when she/he wants to learn a language “to pass an examination,

to use it in one’s own job, to use it in holiday in the country, as a change from watching television, because the educational system requires it” (Wilkins, 1972, p. 184). On the other hand, integrative motivation is defined as “learning a language because the learner wishes to identify herself/himself with or become integrated into the society” of the target language (Gardner, 1983). Therefore, a learner is motivated when she/he learns a language because she/he wants to know more of the culture and values of the foreign language group... to make contact with the speakers of the languages... to live in the country concerned (Wilkins, 1972, p. 184).

Researches in the field of language education have indicated that “attitude to language is a construct that explains linguistic behaviour in particular” (Mamun, Rahman, Rahman, and Hossain, 2012, p. 200). Studies done by Kara (2009), Hohenthal (2003), and Gardner (1985) show that learners’ attitudes, apart from opinions and beliefs, towards learning strongly affect their learning behaviours and consequently on their performance. Moreover, attitude is “a convenient and efficient way of explaining consistent patterns in behaviour” (Mamun *et al.*, 2012, p. 201) where the learner’s attitude towards the language was found to be one of the vital factors influencing the language acquisition (Fakeye, 2010; Kara, 2009).

A large body of research has demonstrated a relationship between attitudinal motivational variables on one hand, and proficiency in a second language on the other (Tremblay and Gardner, 1995; Dörnyei, 1994; Clement, 1980; Gardner and Lambert, 1972). Different researchers have opined their views on socio-psychological variables (Dörnyei, 2005; Williams and Burden, 1997; Ellis, 1994; Gardner, 1985, 2010). According to the socio-educational model of Gardner (1985), there is a difference between language learning motivation (LLM) and classroom learning motivation. LLM comprises integrativeness (I) and attitude towards the learning situation (ALS). I is derived from cultural context and includes socially relevant variables, attention on the individual being interested in learning the language in order to interact with valued members of the other community and/or to learn more about that community (i.e., an integrative orientation and favourable attitude towards the community). Whereas attitude towards the learning situation derives from the educational context, and includes all variables that can be linked directly to the educational system and the experiences associated with the educational environment (Gardner, 1985, p. 15). The second class of motivation is classroom motivation, specifically the language classroom.

Numerous studies have established the relationship between motivation, attitude and English performance (Tahaine and Daana, 2013; Khodadady and Ashrafborji, 2013; Al-Tamimi and Shuib, 2009; Adepoju, 2008). In conclusion, studies suggest the maintenance of motivation to language achievement, persistence in language learning, which all have a significant impact on successful second language acquisition. Consequently, it becomes important to explore the level of motivation existing among students and also the situations or variables which tend to affect the students' motivation level.

Socio-economic background is one of the factors affecting students' SLA and advancement in language learning (Collier, 1988). SES is a multidimensional construct, measuring the SES of an individual based on three variables namely, education, occupation of the head of the household and income of the family (Ensminger and Fothergill, 2003; McLoyd, 1998; Kuppaswamy, 1976). According to Parson, Hinson and Deborah (2001), "SES is the term used to distinguish between people's relative position in the society in terms of family income, political power, educational background and occupational prestige". Saifi and Mehmood (2011) defined SES as "a combined measure of an individual or family's economic and social position relative to others based on income, education and occupation".

According to Noble, Norman and Farah (2005) and Brooks-Gunn and Duncan (1997), SES factors are generally found to be more strongly associated with children's long-term cognitive ability, achievement and language learning.

Socio-demographic variables like age, gender, SES, birth order, etc., and socio-psychological variables like motivation, attitude, anxiety, and self-concept have been found influencing learning ESL. This means that all these variables possess self-explanatory importance in learning English. Then it also becomes necessary to examine the factors influencing these socio-psychological variables affecting learning English indirectly. Literature suggests that LLM and SES are very crucial and have a role to play in learning English and need to be explored. Although many studies have examined either the SES' influence on the learning of English or the relationship between motivation and learning English. Like Coleman report (1966) established the relationship between SES and school achievement, Gayton (2010) explored the relationship between SES and LLM. When it has been established that motivation has a role in second or foreign language learning, then it also becomes vital to probe into the procedure of high or low level of motivation development. Hence, the need arises to look into things which have a relationship with motivation or influencing motivation indirectly affecting learning the

language. Majority of the researches have focused on LLM and SES as a different factor affecting language learning and not SES influencing LLM. Therefore, this study tries to explore the relationship between SES and LLM.

AIM AND OBJECTIVES OF THE STUDY

The aim of the study was to study the level of LLM among the students and to investigate the relationship between SES and the students' LLM at secondary level. Attempt was made to fit a regression model of relationship between students' LLM and the SES to predict association level between independent and dependent factors; variance shared by SES variable. Simple linear regression analysis was conducted to explore the answer for the following research question:

(a) To what extent is there a significant relationship between students' LLM and SES?

RESEARCH METHODOLOGY

The study was both cross-sectional and field investigation in nature, of ex-post-facto research design. The study targeted the students of Class X of residential and non-residential secondary schools affiliated to Central Board of Secondary Education (CBSE) in Jhunjhunu district, Rajasthan. Out of all the thirteen cities comprising 46 CBSE affiliated schools of Jhunjhunu district, one city was chosen by simple random method and all the nine schools of that city were included in the sample. The data comprised

a sample of 823 students. A survey was conducted using a questionnaire to collect information about SES and LLM of the respondents. The questionnaire was divided into two sections. One part had questions on SES components: parents' education, parents' occupation and family income which were categorical in nature. The sample for this study mainly belonged to urban areas, Kuppuswamy's SES scale (1976) was adapted for this study because his scale is an important tool to measure socio-economic SES of families in urban areas (Vijaya and Ravikiran, 2013). In line with this, the researcher considered these three factors as a composite measure of SES. Each variable of SES had four categories. The other part of the questionnaire was on five-point scale ranging from 1-strongly disagree and to 5-strongly agree. There were nine variables comprising integrative orientation (3 items), favourable attitude towards learning English (2 items) and attitude towards learning situation (4 items) measuring LLM. The items/statements for measuring these variables were adapted from Gardner's (1985) Attitude/Motivation Test Battery (AMTB). Face validity and content validity were assessed by experts and changes were made accordingly. The reliability of the questionnaire for SES and LLM was found to be $\alpha=0.735$ and $\alpha=0.608$ respectively. Factor analysis (FA) was conducted to explore the factors. FA also indicated that

instruments possessed construct validity, including sample size adequacy and co-relational matrix. Further convergent and discriminant validity were also assessed through Average Variance Extracted (AVE) method proposed by Fornell and Larcker (1981). The findings of convergent and discriminant analysis indicated that instrument possessed construct validity. FA explored three factors {integrative orientation (IO), favourable attitude (FA) and attitude towards learning situation (ALS)} which was further developed into LLM index. Here, LLM is a construct made up of composite measure of these three variables. SPSS has been used for various statistical data analysis (frequency distribution, reliability, factor analysis and linear regression).

RESULTS AND DISCUSSION

Analysis was carried out in two stages, frequency distribution (Table 1), and the formulation of linear regression (Table 2) of the dependent variable — students' SES and LLM measured by the continuous variables, and SES index (composite measure of *fathers' education, mothers' education, fathers' occupation, mothers' occupation and family income*) and LLM index (composite measure of *IO, FA, and ALS*).

A. Statement of Test Hypothesis

H_0 : There is no statistical significant relationship between students' SES and LLM.

Table 1 presents the demographic data of the respondents. About 64.15 per cent of the respondents belonged

to middle class of SES, whereas 27 per cent of the total respondents belonged to high class of SES and only 8.9 per cent belonged to low class of SES. Out of the total respondents, 37.9 per cent had high level of LLM, 30.7 per cent and 31.3 per cent had average and low levels of LLM respectively.

A simple linear regression was conducted to evaluate how well independent variable (SES) contributes to the regression equation when the variance contribution (R^2) of the factor in the regression model has been accounted. The output revealed a correlation between independent and dependent factor, $r = 0.261$.

The model summary highlighted $R^2 = 0.068$, $F(1, 821) = 10.89$, $p < 0.001$ indicating statistical predictive capability of SES on students' LLM. The F test is significant, which means that the model fits the data and establishes that there is a relationship between independent and dependent factor. The variance shared by SES is only 6 per cent on LLM. SES with a coefficient value of $B = 0.996$, $*p < 0.001$, is statistically significant to influence the students' LLM. This states that there is a positive relationship between SES and LLM and for every unit increase in SES, LLM is increased by 0.996 points.

Table 1
Demographic Data of Respondents (Frequency Distribution)

Variables	Characteristics	Frequency	Per cent	Min.	Max.	Mean	Std dev.
SES	Low (5–7)	73	8.86	5	20	11.55	3.008
	Middle (8–13)	528	64.15				
	High (14–20)	222	27.0				
LLM	Low (16–29)	258	31.3	16	42	32.0522	3.60500
	Middle (30–34)	253	30.7				
	High (35–42)	312	37.9				

Table 2
Relationship between SES and LLM (Results of Linear Regression)

Model		R^2	F	Unstandardised Coefficients		t	Sig.
				B	Std. error		
1	(Constant)	0.068	60.199*	64.351	1.531	42.019	0.000
	SES			0.996	0.128	7.759	0.000

Model 1: Predictors: (constant),
SES dependent variable: LLM.
* $p < 0.001$

The results of simple regression revealed that SES possessed a predictive capability. The findings of linear regression (Table 2) revealed that the SES contributed towards students' LLM. Although the value of R^2 has been very low, i.e., only 6 per cent but it is statistically significant. There was another study done by Gayton (2010) on SES and LLM, including mobility as another variable, where teachers were the respondents and they were interviewed. The method applied was content analysis and it revealed that SES being positively correlated with LLM makes a significant contribution to LLM in contexts when English is an L1 and an L2. Further, Angateeah, Gonpot and Sukon (2014) studied the impact of SES and affective variables on mathematics achievement, in which they found that SES had a positive influence on attitude. Ariani and Ghafournia (2015) explored the probable interaction between Iranian language students' beliefs about language learning and their SES, and revealed that both were connected. Majority of the studies have investigated the relationship among affective variables like motivation, attitude, anxiety, etc. (Yazigy, 2015; Jain and Sidhu, 2013; Shinge, 2005). These studies establish that affective variables are related among each other and influence each other. This study has only examined the influence of SES on LLM and not the interaction among LLM and other attitudinal variables. The findings

of this study reveal that there is a positive relationship between SES and LLM with predictive capability though not high but being statistical significant. This study used objective indicators to measure SES. The SES measure with subjective indicators and interaction among LLM and other affective variables (attitude, anxiety, etc.) might provide different results.

CONCLUSION

The findings from this study throw light on the significant impact of SES on LLM among secondary school students in learning English as an L2. Though there have been studies on relationship between SES and learning English and also between affective variables and learning English, little has been researched on the relationship between SES and LLM. This study establishes that SES affects indirectly learning English through affective variables which need to be explored. The study has found a significant relationship between SES and LLM even though there has been low effect size (R^2) value (6 per cent) and $r = 0.261$ being statistical significant, the study establishes the important role of SES in LLM. However, the study had its own limitation and could not study the interaction of LLM with other attitudinal variables which could have better explained the results and also supported for the low R^2 achieved in this study. Therefore, it is suggested to probe into the variables which affect learning

English as a second language directly or indirectly. The outcome of this would certainly help curriculum developers, textbook writers and practicing teachers in framing their objectives according to the students' needs and demand for learning ESL.

REFERENCES

- ADEPOJU, T.L. 2008. Motivational Variables and Academic Performance of Urban and Rural Secondary School Students in Nigeria. *KEDI Journal of Education Policy*. Vol. 5. No. 2. pp. 23-39.
- AL-TAMIMI, A. AND M. SHUIB. 2009. Motivation and Attitudes Towards Learning English: A Study of Petroleum Engineering Undergraduates at Hadhramout University of Sciences and Technology. *GEMA Online Journal of Language Studies*. Vol. 9. No. 2.
- ANGATEEAH, K.S., P.S. GONPOT, AND K.S. SUKON. 2014. Mathematics Achievement: Impact of Affective Variables and Socio-economic Status. *Proceedings of International Conference on Advanced Education and Management*. U.S.A : DeStech Publication Inc.
- ARIANI, M.G. AND N. GHAFOURNIA. 2015. The Relationship between Socio-economic Status and Beliefs about Language Learning: A Study of Iranian Postgraduate EAP Students. *English Language Teaching*. Vol. 8. No. 9.
- ATKINSON, D. (Ed.) 2011. *Alternative Approaches to Second Language Acquisition*. Abingdon, UK: Routledge.
- BERNARD, J. 2010. Motivation in Foreign Language Learning: The Relationship between Classroom Activities, Motivation, and Outcomes in a University Language-Learning Environment (Unpublished doctoral thesis). Dietrich College of Humanities and Social Sciences (Carnegie Mellon University), U.S.A.
- BHANDARI, S. 2009. Problems of Teaching English at College Level in India. Available at: <http://www.boloji.com/index.cfm?md=Content&sd=Articles&ArticleID=2175#sthash.BHn1CfOG.dpuf>
- BROOKS-GUNN, J. AND G.J. DUNCAN. 1997. The Effects of Poverty on Children. *Future Child*. Vol. 7. pp. 55-71. DOI: 10.2307/1602387
- BROWN, H. 2000. *Principles of Language Learning and Teaching*. New Jersey: Prentice Hall.
- CASEY, R. n.d. *Top Ten Countries that Speak English as a Second Language*. Available at: <https://advertising.knoji.com/top-ten-countries-that-speak-english-as-a-second-language/>
- CISSE H., N.R.M. MENON, C.S. MARIE-CLAIRE, AND V.O. NMEHIELLE (Eds.). 2014. *The World Bank Legal Review, Volume 5: Fostering Development through Opportunity, Inclusion, and Equity*. The World Bank: Washington, D.C. DOI: 10.1596/978-1-4648--0037-5
- CLEMENT, R. 1980. Ethnicity, Contact and Communicative Competence in a Second Language. In H. Giles, W.P. Robinson, and P.M. Smith (Eds.), *Language: Social Psychological Perspectives* (pp. 147-77). Oxford: Pergamon.

- COLEMAN, JAMES, AND OTHERS. 1966. *Equality of Educational Opportunity*. U.S. Government Printing Office: Washington, D.C. Available at: <http://files.eric.ed.gov/fulltext/ED012275.pdf>
- COLLIER, V.P. 1988. The Effect of Age on Acquisition of a Second Language for School. New Focus. *The National Clearinghouse for Bilingual Education*. No. 2. pp. 1–11.
- CORNOY, M. 2007. *Cuba's Academic Advantage: Why Students in Cuba do Better in School*. Stanford, CA: Stanford University Press.
- CORTES, C.M. 2002. The Relationships between Attitude, Motivation, Anxiety, and Proficiency in English as a Second Language of First-Year University Students in Puerto Rico. (Doctoral thesis). Available at ProQuest Dissertations and Theses database (UMI No 3058307).
- DÖRNYEI, Z. 1994. Motivation and Motivating in the Foreign Language Classroom. *Modern Language Journal*. Vol. 78. pp. 273–84.
- . 1998. Motivation in Second and Foreign Language Learning. *Language Teaching*. Vol. 31. pp. 117–35. DOI:10.1017/S026144480001315X
- . 2005. *The Psychology of the Language Learner: Individual Differences in Second Language Acquisition*. Mahwah, NJ: Lawrence Erlbaum Associates.
- ELLIS, R. 1994. *The Study of Second Language Acquisition*. Oxford: Oxford University Press.
- . 1997. SLA and Language Pedagogy: An Educational Perspective. *Studies in Second Language Acquisition*. Vol. 19. pp. 93–116.
- ENSMINGER, M.E. AND K.E. FOTHERGILL. 2003. A Decade of Measuring SES: What it Tells Us and Where to Go from Here. In M.H. Bornstein and R.H. Bradley (Eds.), *Socio-economic Status, Parenting and Child Development* (pp. 13–27). Mahwah: Lawrence Erlbaum.
- FAKEYE, D. 2010. Students' Personal Variables as Correlates of Academic Achievement in English as a Second Language in Nigeria. *Journal of Social Sciences*. Vol. 22. No. 3. pp. 205–11.
- . 2014. English Language Proficiency as a Predictor of Academic Achievement among EFL Students in Nigeria. *Journal of Education and Practice*. Vol. 5. No. 9. Available at: http://www.iiste.org/Journals/index.php/JEP/article/viewFile/11863/12212_1
- FORNELL, C. AND D.F. LARCKER. 1981. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*. Vol. 18. No. 1. pp. 39–50.
- GARDNER, R.C. 1983. Learning Another Language: A True Social Psychological Experiment. *Journal of Language and Social Psychology*. Vol. 2. pp 219–40.
- . 1985. *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. London: Edward Arnold.
- . 2001. Integrative Motivation and Second Language Acquisition. In Z. Dornyei (Ed.), *Motivation and Second Language Acquisition*. US: Second Language Teaching and Curriculum Centre.
- . 2007. Motivation and Second Language Acquisition. *Porta Linguarum*. Vol. 8. pp. 9–20.

- . 2010. *Motivation and Second Language Acquisition: The Socio-educational Model*. New York: Peter Lang.
- GARDNER, R.C. AND W.E. LAMBERT. 1972. *Attitudes and Motivation in Second Language Learning*. Rowley, MA: Newbury House.
- GAYTON, A. 2010. Socio-economic Status and Language-Learning Motivation: To what extent does the Former Influence the Latter? *Scottish Languages Review*. Vol. 22. pp. 17–28.
- GRADDOL, D. 2006. *English Next: Why Global English may Mean the End of English as a Foreign Language*. UK: British Council.
- HENRY, D.L., N. NISTOR, AND B. BALTES. 2014. Examining the Relationship between Math Scores and English Language Proficiency. *Journal of Educational Research and Practice*. Vol. 4. No. 1. pp. 11–29.
- HOHENTHAL, A. 2003. English in India: Loyalty and Attitudes. *Language in India*. Vol. 3. pp. 1–107.
- JAIN, Y. AND G.K. SIDHU. 2013. Relationship between Anxiety, Attitude and Motivation of Tertiary Students in Learning English as a Second Language. *Procedia - Social and Behavioral Sciences*. Vol. 90. pp. 114–23.
- KARA, A. 2009. The Effect of a Learning Theories Unit on Students' Attitudes Towards Learning. *Australian Journal of Teacher Education*. Vol. 34. No. 3. pp. 100–13.
- KHODADADY, E. AND M. ASHRAFBORJI. 2013. Motivations Underlying English Language Learning and Achievement. Sage Open. DOI: 10.1177/2158244013484157
- KUPPUSWAMY B. 1981. *Manual of Socioeconomic Status (Urban)* (1st ed). Delhi: Manasayan, pp. 66–72.
- KORMOS, J. AND T.T. KIDDLE. 2013. The Role of Socio-economic Factors in Motivation to Learn English as a Foreign Language: The Case of Chile. *System*. Vol. 41. No. 2. pp. 399–412.
- McLOYD, V.C. 1998. Socio-economic Disadvantage and Child Development. *American Psychologist*. Vol. 5. No. 185. DOI: 10.1037/0003-066X.53.2.185
- MAMUN, S.A.A., A.R.M.M. RAHMAN, A.R.M.M. RAHMAN, AND M.A. HOSSAIN. 2012. Students' Attitudes towards English: The Case of Life Science School of Khulna University. *International Review of Social Sciences and Humanities*. Vol. 3. No. 1. pp. 200–09.
- NOBLE, K.G., M.F. Norman, AND M.J. Farah. 2005. Neurocognitive Correlates of Socioeconomic Status in Kindergarten Children. *Development Science*. Vol. 8. No. 1. pp. 74–87.
- OXFORD, R. 1990. *Language Learning Strategies. What Every Teacher Should Know*. Boston, MA: Heinle & Publishers.
- PARSON, R. D., S. L. HINSON, AND S. DEBORAH. 2001. *Educational Psychology: A Practitioner-Researcher Model of Teaching*. Singapore: Thomson Learning Inc.
- SAIFI, S. AND T. MEHMOOD. 2011. Effects of Socio-economic Status on Students Achievement. *International Journal of Social Sciences and Education*. Vol. 1 No. 2. pp. 119–28.

- SCRASE, T.J. 2002. Globalisation and the Cultural Politics of Educational Change: The Controversy over the Teaching of English in West Bengal, India. *International Review of Education (Springer)*. Vol. 48. No. 5. pp. 361–75. Available at: <http://www.jstor.org/stable/3445461>
- SEIDLHOFER, B. 2005. English as a *lingua franca*. *ELT Journal*. Vol. 59. No. 4. DOI:10.1093/elt/cci 064
- SHAVIT, Y. AND H. BLOSSFELD (Eds.). 1993. *Persistent Inequality: Changing Educational Attainment in Thirteen Countries*. Boulder, CO: Westview Press.
- SHINGE, M. 2005. Interplay among Anxiety, Motivation, and Autonomy in Second Language Learners of French: A Quantitative and Qualitative Study (Unpublished doctoral thesis). University of Florida: Florida.
- STEPHEN, D.F., J.C. WELMAN, AND W.J. JORDAAN. 2004. English Language Proficiency as an Indicator of Academic Performance at a Tertiary Institution. *SA Journal of Human Resource Management*. Vol. 2. No. 3. pp. 42–53. Available at: <https://ujdigispace.uj.ac.za/bitstream/handle/10210/2927/English%20language%20proficiency.pdf>
- TAHAINEH, Y. AND H. DAANA. 2013. Jordanian Undergraduates' Motivations and Attitudes Towards Learning English in EFL Context. *International Review of Social Sciences and Humanities*. Vol. 4. No. 2. pp. 159–80.
- TREMBLAY, P.F. AND R.C. GARDNER. 1995. Expanding the Motivation Construct in Language Learning. *The Modern Language Journal*. Vol. 79. pp. 505–18.
- VIJAYA, K. AND E. RAVIKIRAN. 2013. Kuppuswamy's Socio-economic Status Scale-Updating Income Ranges for the Year 2013. *National Journal of Research in Community Medicine*. Vol. 2 No. 2. pp. 79–82.
- WILKINS, D. 1972. *Linguistics in Language Teaching*. Cambridge: CPU.
- WILLIAMS, M. AND R. BURDEN. 1997. *Psychology for Language Teachers*. Cambridge: Cambridge University Press.
- WILSON, J. AND S.C. KOMBA. 2012. The Link between English Language Proficiency and Academic Performance: A Pedagogical Perspective in Tanzanian Secondary Schools. *World Journal of English Language*. Vol. 2 No. 4. DOI:10.5430/wjel.v2n4p1
- YAZIGY, R.J. 2015. Social and Psychological Factors in Learning English as a Foreign Language in Lebanon (Doctoral thesis). Available at ProQuest Dissertations and Theses Database (UMI No U167410).

Punctuation and the Sanskrit Language

JATINDRA MOHAN MISHRA*

Abstract

Today, almost all the written languages in the world use punctuation marks. Origin of these can be traced as long as 2500 years ago in Europe. But the standardisation of them can be attributed to the evolution of print technology. Now it looks like punctuation is an essential part of a written expression in any language. In this globalised world, English being the international language is imitated for its punctuation marks by almost all the languages of the world, including Sanskrit.

INTRODUCTION

Most of us must have come across the following statements which change the meaning with the use of punctuation. An English professor wrote the words “a woman without her man is nothing”, on the white board and asked his students to punctuate it correctly. All of the males in the class wrote: “A woman, without her man, is nothing”. All the females in the class wrote: “A woman: without her, man is nothing”. It shows the powerful function of punctuation particularly in written language.

WHAT AND WHY OF PUNCTUATION?

Punctuation is a mark used in written language that divides sentences and phrases for clarity and comprehensibility. Full stop (.), comma (,), colon (:), semicolon (;), question mark (?), exclamation mark (!), apostrophe (’), hyphen (-), dash (—), ellipsis (...), oblique (/), quotation marks (‘ ’, “ ”), parentheses (()), square brackets ([]), are the punctuation marks used to indicate various meanings to written expression to disambiguate. Even underline, capitalisation,

* Associate Professor of Sanskrit, Department of Education in Languages, NCERT, New Delhi-110016.

italics, space between words and paragraph fall under wider definition of punctuation. These symbols are widely used in most of the written languages (syllabic) around the world with some variations. In oral language, these are served by accent and pauses.

HISTORY

Most of the ancient languages like ancient Greek, Latin, Sanskrit, Tamil, etc., did not use punctuation marks and earliest citation of a few punctuation was found in Jordan¹ around 5th century B.C. Indian manuscript tradition shows that texts were written without any punctuation marks or even spaces between words and sentences. This perhaps was the reason behind different readings of the Vedas as *saṃhitā pātha* and *pada pātha*, (former as unpunctuated and undifferentiated and latter with pauses and punctuations).

Panini's *Aṣṭādhyāyī* also perhaps was written without any breaks which was later on divided into different *sūtras* (formulae) and left scope for further *yogavibhāga* wherever felt necessary to accommodate unsolved examples. In first century B.C., Patañjali and many subsequent grammarians have imagined many elided sounds (letters) in between two *sūtras*, e.g., (ॠ) ऋडिति च, लिङ्याशिष्यङ् (ल्), हलन्त्यम् (ल्), अस्तिसिचस् स् अपृक्ते and so on.

In 17th century A.D., texts of Sanskrit and Marathi started using full stop marks (I) and (II) at the end of sentences in prose and poetry

respectively. Metres having 4 lines were also divided by (I) mark after 2nd line, but did not serve the purpose of punctuation as many words of the sentence of the 1st half occurred in the later half.

If at all Sanskrit ever had punctuation, it can be only Vedic accent marks of *anudātta* and *svārīta* horizontal (-) and vertical (I) strokes respectively. Besides, kampa marks 1 and 3 for short and long vowels respectively. *Padapātha* of Vedic texts had marks of perpendicular stroke (I) and *avagraha* mark (s) for distinguishing words and compounds respectively which can somehow be called as punctuation. But, Vedic marks of accentuation and *Padapātha* are usually not considered as punctuation.

Punctuation has the purpose of aiding in understanding and correct reading by division of text into sentences, clauses and words. While Vedic accentuation serving these purposes gives meaning to words and compounds, it also aids for correct pronunciation of words.

Unique to accent mark is, it is applied to each and every syllable of a text. It is not an indicator for pause but pattern of pronunciation. Punctuation plays a role at word, clause and sentence levels. Accentuation, over and above these, has role at phonological and morphological levels. Punctuation by its presence gives emotions to word and sentence while accentuation within the word is as vital for meaning

as grammar. Rules of accentuation play a role in almost all grammatical operations like *sandhi*, *samāsa*, *kāraka*, noun, verb, indeclinable, etc. So, role of accentuation encompasses punctuation and other layers of language as far as Vedic language is concerned. However, post-Vedic Sanskrit language lost the tradition of accentuation, so much so that distinction among the pronunciation of *udātta*, *anudātta*, *svarita* and *pracaya* is completely forgotten, let alone application of these. Without application of accentuation, Sanskrit language was open for ambiguity. Still early classical literature like *Rāmāyana*, *Mahābhārata*, literature of *Bhāsa*, *Kālidāsa*, *Śūdraka* or shastric texts like *Nirukta*, *Mahābhāṣya*, *Nāṭya Śāstra*, etc., were successful doing away with ambiguity.

But later on around 6th century² ambiguity became an ornament for the speech, *viz.* *śleṣa* and scholars freely used this in their literature to exhibit their scholarship. However, ambiguity was limited to deliberate use of the scholars. It had never been a weakness of Sanskrit language in spite of no use of accentuation or punctuation and what is more, all the *sūtra* and *bhāṣya* literature thrive on disambiguity. By definition itself, *sūtra* is a statement with minimum possible syllable, without ambiguity and avoiding problems of over-application and under-application.

PUNCTUATION IN SANSKRIT

While punctuation is indispensable for languages like English, it

should be examined why and how it has never been a part of Sanskrit language. It will not be wrong to say that even today barring a few, most punctuation marks can be avoided in Sanskrit writing.

1. Use of Full Stop (./)

The need for punctuation was perhaps first felt for marking the completion of a sentence; for which a full stop was introduced across the languages. Sanskrit shastric tradition, instead of talking about a pause in utterance or a mark for written form, discusses about completion of sense in order to complete the sentence. So, various shastras define what a sentence is, e.g., वाक्यंपदसमूहः.....आकाङ्क्षायोग्यतासन्निधिश्चवाक्यार्थज्ञाने हेतुः (Tarkasamgraha), कारकान्विता क्रिया वाक्यम् (Amarakosa), तिङ्सुबन्तचयः वाक्यम्, परस्पराभिसम्बन्धः पदसमूहो वाक्यम् (Traditional linguists), आख्यातं साव्ययकारक-विशेषणं वाक्यम्, एकतिङ्, (Mahābhāṣya). Thus, when a sentence is understood with its full context, the end of it is obviously understood even without a punctuation mark. This could be the reason why our manuscript tradition never bothered about using a full stop mark to denote the completion of a sentence. It was just left to the reader to decide on the completion of sense. Though in prose, full stops are seen in later manuscripts and printed texts, but verses in Sanskrit are not written with any mark irrespective of the number of sentences in it³.

2. USE OF SPACE

The space between words also becomes redundant and many times

restricted by rules of case-ending, compound and *sandhi*. The *sandhi* rule in a sentence, though optional, restricts the use of space and thus makes that redundant. For example, a phrase in *Bhagavad Gita* – कर्मण्येवाधिकारस्ते (meaning – you have rights only on your acts) can be optionally written as कर्मणि एव अधिकारः ते. Here if *sandhi* is applied, there is no scope for space. Even without *sandhi*, if words are joined together, space is just for convenience of reading and not for grammatical correctness, as words can be recognised and separated through their case-endings. Further, space is ruled out in compounds of multiple words. For example, राष्ट्रियशैक्षिकानुसन्धानप्रशिक्षणपरिषद्. (in Sanskrit), which is written as राष्ट्रीय शैक्षिक अनुसन्धान एवं प्रशिक्षण परिषद् in Hindi (National Council of Educational Research and Training) is without any space though the words both in Hindi and Sanskrit are same. If we have to use space, each word will require separate case-endings, such as राष्ट्रिया शैक्षिकस्य अनुसन्धानस्य प्रशिक्षणस्य च परिषद्. Giving space within a compound without adding case-ending is not allowed in Sanskrit and with case-endings, space between words is dispensable.

3. Use of Comma (,)

The frequently used punctuation mark is comma, which is used to separate the items in a list or to show where there is a slight pause in a sentence. It doesn't only help the reader in clear reading, but also affects the meaning of a sentence,

for example, 'eats shoots and leaves'. If this sentence part is punctuated with a comma, *i.e.*, 'eats, shoots and leaves', the meaning is completely changed. While the former is a narration about Panda an animal, eating shoots and leaves; the latter is about a person who eats, fires bullets and leaves the place. Had that been the case in Sanskrit language, the sentence would be खादति अङ्कुराणि पत्राणि च. No punctuation would affect the meaning. This is due to the basic difference of syntax of both the languages. English having positional pattern of syntax, place in the syntactical structures carries the meaning of subject, object, etc., and punctuation plays the role for positioning the clauses. Sanskrit being completely inflectional in nature, meaning of the words and its relation with other words in the sentence is decided by the case-ending suffixes. Alteration of word order in the sentence does not affect the meaning. So, role of punctuation is scarce. Moreover, rules of *sandhi*, *samāsa* and use of particle 'ca' make use of comma even redundant in Sanskrit. For example, in the sentence पत्रं पुष्पं फलं तोयं यो मे भक्त्या प्रयच्छति (meaning – who offers me leaves, flowers, fruits and/or water with devotion...), there is scope for application of comma for the list of four items. But, that is done away with by the application of *sandhi* rule that gives the form as पत्रमुष्पम्फलन्तोयं. So, when not even space between the words is required, how can there be application of punctuation mark.

Though the above-mentioned phrase has no spaces between the words, but it is still considered to have four separate words and this is recognised by the case endings, 'अम्', with each one. This could also be expressed in compound form as पत्रपुष्कलतोयानि, which is just a single word and so the scope of comma is totally ruled out. Normally, this kind of group of words is written and said with the use of particle 'ca' (which in this case is not mentioned due to poetic liberty) as in पत्रं पुष्पं फलं तोयं च, 'ca' at the end of the list with same case-endings serves the basic purpose of comma.

4. Use of Question Mark (?)

Let us examine the use of question mark (?). It is widely used for interrogative expressions, but it is not necessary everywhere, even in English. Questions beginning with 'wh' words actually do not require the mark (?) as there is no ambiguity without that. For example – 'who are you', 'where are you living', 'what is your name', etc. Even without question mark, sentences are not ambiguous. Sentences beginning with helping verbs also make questions without ambiguity, like 'Are you mad', 'Do you mind' and so on. Only in case of informal dialogues, sentences in affirmative structure having intonation of question need a mark (?) in order to differentiate from a normal expression, such as "Everything alright?" for "Is everything alright?". But in English, question mark is invariably used for all sorts

of direct questions (However, this is purely author's idea and assumption, can be contested).

Similarly, in Sanskrit, derivatives of the stem 'कम्' are used for 'wh' words of English, such as – कः/का (who), कम् (what) कतमं (which), कुत्र (where), कदा (when), कं/कां (whom), कस्य/कस्याः (whose) and कमिथम् (why). Words केन, कस्मै, कस्मात्, कस्य, कस्मिन् are used for phrases, by whom, from what, for whom and in what, respectively. When these words are used, the sentences become unambiguously questions. Unlike in English, these words can be placed anywhere in the sentence without affecting the notion.

For the other format of question in English, *i.e.*, by beginning the sentence with a helping verb whose answer is mostly 'yes' or 'no', the indeclinable 'अपि' is used in Sanskrit. For example, 'Are you fine', is said as 'अपि भवान् कुशली'. In both the languages, question mark is dispensable as there is no ambiguity, but still it is used in written English. This is one of the rare cases where Sanskrit language has a fixed word order. If the indeclinable, 'अपि' is used at the beginning of sentence that forms a question to be answered in 'yes' or 'no' and if it is used elsewhere, it means 'also' or 'too'. For example, 'भवान् अपि कुशली' or 'भवान् कुशली अपि' would mean 'you are also fine'.

5. Other Punctuation Marks

Below are the usages (not exhaustively) of some other punctuation marks in English with Sanskrit expression.

Colon (:) – These are our options: we go by train and leave before the end of the show; or we take our vehicle and see it all. In Sanskrit, it can be like – वयं रेलयानेन गच्छामः प्रदर्शनस्य समाप्तेः पूर्वम् आगच्छामः अन्यथा स्वकीयं यानं स्वीकुरुमः पूर्णं पश्यामः च इति अस्माकं वकिल्पम्. Purpose of colon is met with the use of the indeclinable word 'इति'. The main clause can be placed at the end preceded by इति; the main clause followed by 'यत्' at the beginning can also convey the same notion. इति (meaning 'thus') and यत् (meaning 'that') are generally used in such types of expression.

Semicolon (;) – This is used to separate two main clauses which is conveyed by 'च' in Sanskrit.

Example – The sun was already low in the sky; it would soon be dark. सूर्यः गगने अस्ताञ्चलं प्रति गतः शीघ्रं च अत्र तमसाच्छन्नं भवेत् ।

Exclamation mark (!) – This is used at the end of a sentence expressing surprise, joy, anger, shock or other strong emotions. These emotions are expressed by various particles in Sanskrit without any mark, such as 'अहो', हा, अरे, इ, उ, अहह and so on and so forth.

Apostrophe (') – This along with 's' indicates that a thing or person belongs to somebody. Example – my sister's husband. This is actually shortened form of genitive case conveyed by 'of'. It has no scope at all as case-ending is mandatory in Sanskrit. Here it is translated as 'मम भगिन्याः पतिः' or at the best, it is shortened to make a genitive compound as 'मम भगिनीपतिः'.

Though the list of punctuation marks is not exhausted or all the variant usages of those marks are detailed here with examples, it is understandable that nature of Sanskrit language does not require or allow (largely) the use of punctuation.

CONCLUSION

Although in print form, we use punctuation marks in Sanskrit language, it is more for easier reading than to disambiguate. Historically, except Vedic accentuation marks, Sanskrit writing tradition never used punctuation marks until 17th century perhaps with the revolution of print in paper. Sanskrit language by its nature explains the end of words and sentences and so never needed spacing or marks. One who is well-versed with the nature of language can easily distinguish words and sentences from continuous and uninterrupted lines. But, by the time other languages evolved and traditional shastric study of Sanskrit diminished, written form of the language borrowed and adopted some punctuation marks from the West for easier comprehension of ordinary readers. Still unpunctuated expression is made in metric poeties by the scholars. Punctuations are used in prose only.

Although the basic purpose of punctuation is to both disambiguate and for easier reading, it serves only the latter for Sanskrit. As far as disambiguation is considered, punctuation is not very useful as

it is done by other means and in many cases it has no scope at all in Sanskrit. However, it can be said that no language is completely devoid of ambiguity, be it Sanskrit or English. For example, Sanskrit expressions like विद्या विनयेन शोभते can be विद्या विनये न शोभते, पार्वती-परमेश्वरौ can be पार्वतीप-रमेश्वरौ in unbroken writing.

Similarly, in English even with punctuation, ambiguity cannot be completely ruled out. For example— I love you too. The word ‘too’ can be

construed with ‘I’ as well as ‘you’. This can be translated in Hindi both ways, i.e., ‘मैं भी तुम से प्यार करता/करती हूँ’ and मैं तुम से भी प्यार करता/करती हूँ. Even punctuation cannot disambiguate here. Only context or accent can convey the desired meaning. So, should we teach punctuation is the question. Just for the sake of clarity and easier reading we can use space between words and a full stop at the end of sentence. No other form of punctuation is natural to Sanskrit language.

End Notes

1. The oldest known document using punctuation is the “Mesha Stele”, i.e., an inscribed stone set up around 840 B.C. by king ‘Mesha’ of Moab (a kingdom located in modern Jordan).
2. Time of the Mahākāvya Kirātārjunīyam of Bhāravi.
3. For example, the first verse in the prologue of the play ‘Mudrārāksasa’ by Viśākhadatta in 4th century:

धन्या केयं स्थिता ते शिरसि शशिकला किं नु नामैतदस्या
नामैवास्यास्तदेतु परिचितमपि ते विस्मृतं कस्य हेतोः।
नारीं पृच्छामि नेन्दुं कथयतु विजया न प्रमाणं यदीन्दु-
देव्या निहोतुमिच्छोरिति सुरसरितं शादयमव्याद्विभोर्वः॥

The verse consists of 7 sentences without use of any punctuation.

REFERENCES

- DHRUVA, K.H. 1923. *Visakhadatta’s Mudra-Rakshasa*. Poona: The Oriental Book-Supplying Agency.
- GOPAL DUTT PANDEY CHAUKHTRA. 1997. *Ashtadhyayi*. Varanasi: Surabharati Prakashan.
- HORNBY, A.S. 2000. *Oxford Advanced Learner’s Dictionary of Current English* (Sixth Edition). Oxford: Oxford University Press.
- PT. SHRI NARAYAN DUTTA TIPATHI AND PT. SHRI RAMNARAYAN DUTTA SHASTRI. 1993. *Laghusiddhantakaumudi*. Gorakhpur: Gita Press.
- SHRIMAD BHAGAVAD GITA-SHANKARA BHASHYA (Commentary by Shankaracharya). 2015. Gorakhpur: Gita Press.
- SIR MONIER MONIER WILLIAMS. 1993. *A Sanskrit-English Dictionary (Compact edition)*. Delhi: Sri Satguru Publications Indological and Oriental Publishers.

Outcome-based Education and Constructivism Synergy Challenges and Possibilities

C.G. VENKATESHA MURTHY*

Abstract

The author has discussed Spady's Outcome-based Education (OBE) which embodies the idea that the best way to learn is to first determine what needs to be achieved as outcomes of an educational programme. Once this is done, the strategies, processes and techniques can be put in place to achieve the targeted exit goal. It discusses the OBE philosophy, aims, principles, assessment criteria and benefits. Also discussed is the constructivist perspective as could be superimposed on OBE, and presents challenges and possibilities to focus on OBE using the lens of constructivism.

BACKGROUND

Education is a sub-system of social reality. Education does not happen in a real setting but operates in a contrived setting where different things are planned and provided to children by design. Thus, education is a process of planned interventions. Everything happens by design. Thus,

it acts as a catalyst in accelerating the rate of maturation among learners. Education has the responsibility of providing what society wants it to give. In this backdrop, education is accountable and answerable to the society. Ultimately, education has the responsibility of preparing young students of the present society as

* Professor, Regional Institute of Education, NCERT, Manasagangotri, Mysore-570 006.

useful adults who should contribute for the nation-building as well as make their life meaningful and rewarding. In this enterprise, there are a number of new thoughts and views which inform and influence us and also compel us to change. Education must be able to address to the needs of the changing society and its aspirations at large.

Currently, Outcome-based Education (OBE) has been adopted around the world, at different levels. Interestingly, this is one philosophy which has attracted the attention of functionaries both at school education as well as higher education. Australia and South Africa adopted OBE policies in the early 1990s but have since been phased out (Donnelly, 2007; Allais, 2007). The United States has had an OBE programme in place since 1994 that has been adapted over the years (Austin, 2014). In 2005, Hong Kong adopted an outcome-based approach for its universities (Kennedy, 2011). Malaysia implemented OBE in all of their public schools systems in 2008 (Mohayidin, 2008). The European Union has proposed an education shift to focus on outcomes, across the EU (European Commission, 2012).

Outcome-based education is chiefly associated with the seminal work of William Spady, a sociologist, who is considered the father of outcome-based education. OBE is referred to by over 20 different names, including Systemic Education Restructuring, Performance-based

Education, Standards-based Education Reform, High Performance Learning, Total Quality Management, Transformational Education and Competency-based Education.

OBE is defined by Spady (1994) as a "...comprehensive approach to organising and operating an education system that is focused in and defined by the successful demonstrations of learning sought from each student".

According to Tucker (2004), "Outcome-based education (OBE) is a process that involves the restructuring of curriculum, assessment and reporting practices in education to reflect the achievement of higher order learning and mastery rather than the accumulation of course credits". Thus, the primary aim of OBE is to facilitate desired changes within the learners, by increasing knowledge, developing skills and/or positively influencing attitudes, values and judgement. OBE embodies the idea that the best way to learn is to first determine what needs to be achieved. Once the end goal (product or outcome) has been determined, the strategies, processes, techniques, and other ways and means can be put into place to achieve the goal.

Spady (2004) holds the view that OBE is an educational theory that bases each part of an educational system around 'goals' (outcomes). By the end of the educational experience, each student should have achieved the goal. There is no specified style of teaching or assessment in OBE, instead classes, opportunities and

assessments should all be based around helping students achieve the specified outcomes.

According to Killen (2000), “OBE, can be viewed in three different ways — as a theory of education, or as a systemic structure for education, or as classroom practice. Ultimately, we need to align the systemic structure and the classroom practice with the theory if we are to have genuine outcome-based education. We can think of OBE as a theory (or philosophy) of education in the sense that it embodies and expresses a certain set of beliefs and assumptions about learning, teaching and the systemic structures within which these activities take place”.

He further says, “the quality of an educational system can be judged from at least three perspectives: the inputs to the system, what happens within the system, and the outputs from the system. Those who are interested in inputs will focus their attention primarily on finances, resources, infrastructure, etc., and may use economic rationalism as the basis for their judgements about the quality or value of the system.

Those interested in what happens within the system will focus their attention primarily on the processes used to organise, control and deliver education and training.

Those interested in outcomes will focus their attention primarily on the products or results of education.

It can be argued that all aspects of education are important and that

quality should not be judged from any narrow perspective. However, in recent years there have been increasing calls in the Western society for greater attention to be paid to the outcomes of education so that the return on investments in education (particularly public education) could be evaluated. These increasing calls for accountability were one reason for the rapid spread of various forms of outcome-based education in countries such as the USA and the UK during 1980s and 1990s. In Australia also, the concept of educational accountability was one of the driving motives behind the introduction of OBE.

(A) OBE Philosophy

Spady (1994) proposes three basic assumptions: all learners can learn and succeed; success breeds success; and ‘teaching institutions’ (schools) control the conditions of success.

Killen (2000) defines two basic types of outcomes. The *first* includes performance indicators often measured in terms of test results, completion rates, post-course employment, and so forth. It also emphasises on learner’s mastery over the traditional subject related to academic outcomes/content and some cross-discipline outcomes (such as problem-solving or working cooperatively). The *second* is less tangible and usually expressed in terms of what the learners know, are able to do or are like as a result of their education. It stresses long-term,

cross-curricular outcomes which relate to future life roles of the learner (such as being a productive worker, a responsible citizen or parent). These two approaches are what Spady (1994) calls traditional/transactional (content-based) learning system and transformational (outcome-based) learning system respectively.

(B) Aims of OBE

Spady (1994) emphasises that the decision of what and whether the learners learn is more important than when it happens and through what means (how) they learn it. He therefore identifies two key aims for OBE:

- ❖ Ensure all learners are successful in that they are equipped with the knowledge, skills and qualities (values and attitudes) required after they exit the educational system, and
- ❖ Achieve and maximise selected outcomes for all students by structuring and operating education facilities to be success-oriented.

Spady also holds that while all learners can learn and succeed; they cannot do so on the same day because learners have different learning rates as well as learning styles. Further, since successful learning breeds more successful learning, the importance of having a stronger cognitive and psychological foundation of prior learning cannot be underestimated. And since the

conditions directly affecting learning are under the 'educational system's control', learning is dependent on the willingness of teachers and others to believe in the approach and support learners in their learning. OBE philosophy requires educators to focus more broadly on accomplishing results *versus* simply providing a service.

(C) OBE Principles

Four principles guide the transformational OBE approach. Taken together they strengthen the conditions for both learners' and teachers' success:

- Clarity of focus
 - Design down
 - High expectations
 - Expanded opportunities
- a. According to Spady (1994), the basic principle of transformational OBE is the **clarity of focus**. This principle infers that curriculum development, implementation and evaluation should be geared by the outcomes which are expected as the culminating demonstrations of the learners. The principle clearly delineates that the articulation of the desired end point is essential for successful outcomes (Willis and Kissane, 1997). Curriculum planners and educators have to identify a clear focus on what they want learners to be able to demonstrate at the end of significant learning time. Once these outcomes have

- been identified, the curriculum is constructed by backward mapping of knowledge and skills.
- b. The **design down** aspect infers that all curricular and educational activities should be designed back from the point where the 'exit outcomes' are expected to happen.
 - c. The principle of **high expectations** elicits higher level of standards than would normally be set, as only those can be labelled completed. Further, learners are supported to culminate higher level of performance (Spady, 1996).
 - d. **Expanded opportunities** provide for a flexible approach in time and teaching methodologies matched against the needs of the learner allowing more than one opportunity to succeed (Killen, 2000).
4. Assessment should reflect the knowledge and skills that are most important for learners to learn.
 5. Assessment should tell educators and individual learners something they do not already know, stretching learners to the limits of their understanding and ability to apply their knowledge.
 6. Assessment should be comprehensive and explicit.
 7. Assessment should support every learner's opportunity to learn things that are important.
 8. Because learners are individuals, assessment should allow this individuality to be demonstrated.

In order to ensure fair, equitable and transparent judgement, the criteria used during the assessment process must be identified, formulated and made known to all candidates before assessment takes place.

According to Spady, in order to determine whether a candidate's demonstration/performance was sufficient, the assessment must be:

(D) Assessment Criteria

Killen (2000) says, to be useful in an OBE system, assessment criteria should conform to the following principles:

1. The assessment procedures should be valid — *(they should assess what they are intended to assess)*
 2. The assessment procedures should be reliable — *(they should give consistent results)*
 3. The assessment procedures should be fair — *(they should not be influenced by any irrelevant factors such as the learners' cultural background)*
- (a) Summative (continuous monitoring with feedback),
 - (b) Performance-based (authentic in the workplace/ real-life environment), and
 - (c) Criterion-referenced (assessment criteria).

The transition from traditional/ transactional learning to transformative outcome-based learning requires educators to facilitate the learning process by creating and expanding learning

opportunities. The learner's role is to actively participate in and contribute towards the learning process. To facilitate learning curriculum, (learning programme) development is essential.

There are many positive aspects to OBE, particularly from a transformational viewpoint.

- (a) It supports a rational approach to education as a means rather than an end in itself.
- (b) It supports cooperative learning.
- (c) It demands that those who plan, manage and account for what happens to focus their efforts onto learning and attainment of desired outcomes.
- (d) Learning is no longer time and teacher dependent.
- (e) Learners, educators and others who support learning have to become more attune to creating the conditions that support learning and attainment of desired outcomes.

(E) Benefits of OBE

- (a) Clarity:** The focus on outcomes creates a clear expectation of what needs to be accomplished by the end of the course. Students will understand what is expected of them, and teachers will know what they need to do during the course.
- (b) Flexibility:** With a clear sense of what needs to be accomplished, instructors will be able to structure their lessons around the students' needs. OBE does

not specify a specific method of instruction, leaving instructors free to teach their students using any method. Instructors will also be able to recognise diversity among students by using various teaching and assessment techniques during their class. OBE is meant to be a student-centred learning model. Teachers are meant to guide and help students understand the material in any way necessary, study guides and group work are some of the methods instructors can use to facilitate students' learning.

- (c) Involvement:** Student involvement in the classroom is a key part of OBE. Students are expected to do their own learning, so that they gain a full understanding of the material. Increased student involvement allows students to feel responsible for their own learning, and they should learn more through this individual learning. Another aspect of involvement is parental, and community involvement while developing curriculum, or making changes to it. OBE outcomes are meant to be decided upon within a school system, or at a local level. Parents and community members are asked to give inputs in order to uphold the standards of education within a community and to ensure that students will be prepared for life after school. Apart from the

just-mentioned benefits, the present author wishes to add one more benefit of OBE as follows.

(d) Equitable Opportunities: OBE is concerned about the learning by all learners. This is opposed to the traditional mass teaching strategy, where a teacher transmits textbook information to students at most with paraphrasing it, suiting the levels of average learners. Whereas, OBE provides opportunities as much as different learners require. It can respond to differing learning speed and learning styles of learners. It has scope for group work, individual projects, and it has no rigid methodologies. Thus, scaffolding can be provided by teachers as much as the learners require. Therefore, it can cater to the equitable requirements of all learners.

In sum, OBE has distinctly transformational qualities as visualised by its proponents. But, the challenge lies in understanding its philosophy, and in willing to own and work towards it by all stakeholders in order to achieve the end results it visualises.

CONSTRUCTIVISM

Since the National Curriculum Framework for School Education, (NCFSE) 2000, social constructivism got central stage in School Education in India. But, it was in NCF 2005, that Constructivism got the centre-stage in the country.

Constructivism is a philosophical position which holds a view that every learner constructs her/his knowledge. Knowledge is something which cannot be passed on from the teacher to his student, while what gets transferred from a teacher to a student is only the information. Information is not knowledge. Knowledge is defined by Plato as **justified true belief**. Mere information does not satisfy these conditions of knowledge and hence does not become knowledge. Therefore, teacher has the responsibility of providing suitable learning opportunities and experiences by design. Through these opportunities and experiences, she/he is expected to facilitate learners to construct knowledge.

Constructivism has been understood from cognitive perspective as well as from social perspective. The cognitive constructivist, Jean Piaget, articulated mechanisms by which knowledge is internalised by learners. He suggested that through processes of *accommodation* and *assimilation*, individuals construct new knowledge from their experiences. When individuals *assimilate*, they incorporate the new experience into an already existing framework without changing that framework. This may occur when individuals' experiences are aligned with their internal representations of the world, but may also occur as a failure to change a faulty understanding. *Accommodation* is the process of reframing one's mental representation of the external world to

fit new experiences. Accommodation can be understood as the mechanism by which failure leads to learning: when we act on the expectation that the world operates in one way and it violates our expectations, we often fail, but by accommodating this new experience and reframing our model of the way the world works, we learn from the experience of failure, or others' failure.

The influence of social constructivism in education is also quite prominent. The contribution of Vygotsky in articulating the concept of Zone of Proximal Development (ZPD) has indeed been an important contribution in understanding where does learning take place. This has enabled in understanding how each learner has to be understood as a learner with different ability. Social constructivism encourages the learner to arrive at her or his version of understanding the truth influenced by her or his background and culture. It stresses the importance of the nature of the learner's social interaction with knowledgeable

members of the society. Without the social interaction with other more knowledgeable people, it is impossible to acquire social meaning of important symbol systems and learn how to utilise them. Young children develop their thinking abilities by interacting with other children, adults and the physical world. From the social constructivist viewpoint, it is thus important to take into account the background and culture of the learner throughout the learning process, as this background also helps to shape the knowledge and truth that the learner creates, discovers and attains in the learning process (Wertsch, 1997).

Glaserfeld (1989) emphasises that learners construct their own understanding and that they do not simply mirror and reflect what they read. Learners look for meaning and will try to find regularity and order in the events of the world even in the absence of full or complete information. According to the social constructivist approach, instructors have to adapt to the role of facilitators and not teachers (Bauersfeld, 1995).

Table 1

S. No.	Situations	Teacher	Facilitator
1	Teaching	Covers subject matter through didactic lecture	Helps learners to understand content
2	Learners' position	Passive	Active
3	Transaction	Lectures from the front	Supports from the back
4	Answering situation	Gives answers as per the curriculum	Facilitates learners to explore and arrive their own answers based on their understanding
5	Method of teaching	Direct method	Multiple methods
6	<i>Modus Operandi</i>	Tells	Asks and motivates to answer

7	Favourite approach	Monologue	Dialogue
8	Happy state	Happy if some children answer	Happy when all learners participate, understand and answer
9	Assessment	Of Learning	For learning
10	Encourages	Convergent thinking	Divergent thinking

(A) Constructivist Teaching and Learning Environment

is characterised by the following:

1. Knowledge construction and not reproduction is emphasised.
2. Goals and objectives are derived by the student or in negotiation with the teacher or system.
3. Teachers serve in the role of guides, monitors, coaches, tutors and facilitators.
4. The student plays a central role in mediating and controlling learning.
5. Activities, opportunities, tools and environments are provided to encourage meta-cognition, self-analysis, self-regulation, self-reflection & self-awareness.
6. Multiple perspectives and representations of concepts and content are presented and encouraged.
7. Learning situations, environments, skills, content and tasks are relevant, realistic, authentic and represent the natural complexities of the 'real world'.
8. Primary sources of data are used in order to ensure authenticity and real-world complexity.
9. The learners' previous knowledge constructions, beliefs and attitudes are considered in the knowledge construction process.
10. Exploration is a favoured approach in order to encourage students to seek knowledge independently and to manage the pursuit of their goals.
11. Learners are provided with the opportunity for apprenticeship learning in which there is an increasing complexity of tasks, skills and knowledge acquisition.
12. Collaborative and cooperative learning are favoured in order to expose the learners to alternative viewpoints.
13. Knowledge construction takes place in individual contexts and through social negotiation, collaboration and experience.
14. Problem-solving, higher-order thinking skills and deep understanding are emphasised.
15. Errors provide the opportunity for insight into students' previous knowledge constructions.
16. Assessment is authentic and interwoven with teaching.
17. Scaffolding is facilitated to help students perform just beyond the limits of their ability.

(B) How does the OBE coupled with Constructivism look like?

Understanding the OBE and Constructivism, an amalgamated context could look like this. The attributes could include the following:

1. The exit outcomes are clearly articulated for every course.
2. Commensurate with exit outcomes the curriculum is planned, prepared, implemented, evaluated and renewed.
3. Teachers act as facilitators. They do not teach, they facilitate learning. They are co-constructors of knowledge.
4. Curriculum implementation is negotiated between the facilitators and learners.
5. There are no rigid teaching methodologies. Teachers enjoy complete autonomy of the choice of the methods and take full responsibility for the consequences of the autonomy to ensure achievement of exit outcomes.
6. Facilitating and motivating learners to learn is the common principle.
7. Making learners learn at their own pace is ensured by teachers.
8. Collaborative learning becomes the favoured approach.
9. Knowledge construction is the purpose but not the knowledge reproduction.
10. Peer learning is encouraged.
11. Exploration is used as an important methodology.
12. Meta learning and skills are encouraged.
13. Contingent scaffolding is provided by facilitators.
14. Authentic learning and authentic assessments become twin principles.
15. Preference for 'assessments for learning' than 'assessment of learning'.
16. Learners take more autonomy for their learning.
17. There is no scope for competition. No learner competes with the other.
18. Development of deep understanding, insights and functional skills are focused.
19. Emphasis on the development of self-analysis, self-regulation, self-reflection and self-awareness.
20. The learning culminates with the achievement of exit outcomes.

(C) Challenges and Possibilities to Focus on OBE Using the Lens of Constructivism

Some of the challenges and possibilities include the following:

(1) Teacher preparation programme:

It has the following implications:

- (a) The pre-service teacher preparation programme has tremendous responsibility to identify potential student-teachers based on their aptitude for teaching apart from their interest. Both the aspirations of OBE and Constructivism will fail miserably if right kind of student-teachers are not selected.

With right student-teachers in place, it assures right kind of teacher preparation programme. The ultimate purpose of teacher preparation gets achieved.

- (b) Having taken students, if the entire faculty involved in the teacher preparation programme does not share the same vision and mission, the impact on the student-teachers will be abysmally low. Therefore, an institution must equip itself to work towards the goals of OBE coupled with constructivist aspirations.

(2) In-service teacher education programme: Any school education system which is already functioning with a certain ideology and philosophy based on the training that the teachers have had, will find it difficult to move to a new philosophy and new ways and means of doing things. The rigidity of the system can be detrimental for any change. Taking all the in-service teachers towards a new philosophy should be done on massive level and convincing the intrinsic purpose of education among all teachers. The system must attempt to change itself. Massive lobbying in favour of the needed change can help in changing the scenario.

(3) Creation of professional development platforms: Any educational system must be able to create professional development platforms for teachers, which should be capable of supporting teachers contingent upon their need. Therefore, online and on-site support systems to

handle a new system of education must be made available at the doorsteps of all teachers. It is easier said than done. Nonetheless, there should be enough opportunities for teachers for their development. For example, NCERT has created NROER (National Repository of Open Educational Resources), likewise Karnataka has created KOER (Karnataka Open Educational Resources). Karnataka also has Subject Teacher Forums. Apart from this, there should be scope for a number of small group and large group interactions among professional practitioners to share success stories.

(4) ICT mediation in teaching learning: It is needless to say that information and communication technology has a vast potential making learners autonomous as well as in making learning enjoyable and authentic. All teachers must be enabled to appreciate ICT mediation in teaching learning contexts. Until and unless teachers themselves are competent enough to understand the potential of ICT, they may not be able to provide any academic support to learners. Ensuring that all teachers understand and appreciate this, is a challenge. But the possibility is, the state will have to take initiatives in negotiating with the teachers to understand and appreciate the potential of ICT in teaching learning contexts.

(5) Addressing inclusive principles: It is a paradox that all teachers, who are in the teaching system

are not sensitive to the issues and concerns of inclusive education. It is also true that they are perhaps not trained in this. Therefore, organising massive training programmes for all teachers focusing on addressing inclusive concerns in any classroom covering the socially disadvantaged, disabled groups on the one hand, and understanding the talented, the gifted and the creative children on the other hand, apart from addressing the needs of the so-called average learners in any heterogeneous classrooms. This alone can enable teachers to be sensitive to inclusive principles of classrooms.

(6) Working towards equality pedagogy: Equality pedagogy, though emerged in the context of multicultural educational settings, its implications have the role to inform and influence every classroom in terms of providing learning opportunities and experiences as much as different children require. This indeed works towards inclusive requirements as well as quality requirements. Therefore, understanding the ZPD (Zone of Proximal Development) of learners becomes very important for all teachers. Therefore, there is a need for introducing the social constructivist perspectives for all teachers and enable them to understand the concept of ZPD. Providing suitable scaffolding for learners at different rates of learning also becomes an important challenge and a requirement.

(7) Total quality human resource development programme: The education programme planned and provided to children at different levels must be able to work towards total quality human resource development. There must be scope for understanding the potentialities of learners, commensurate with their potentialities children must be channelised with appropriate guidance and counselling in selection of suitable programmes and in enabling them to move towards reaching self-actualisation. Attempt must be made to develop human resources to its maximum in all individual learners.

(8) Accountability to system: The OBE aims at accountability to the system in an education programme. Therefore, no education programme can afford to have some goals and not achieve them. In most of the educational programmes, there are indeed goals and objectives articulated. But, there is a big gap between what is visualised and what is achieved. Therefore, there is a need for a change in the system, where the exit outcomes intended of any programme will have to be achieved by the system. This requires a very different perspective of looking at all educational programmes, their curriculum, and what gets achieved at the end. It should be construed as achievable and work backwards in order to make it work.

Summing Up: There is merit in working towards OBE. It is important that the Indian educational scene

benefits from OBE. It needs to be articulated in the Indian context by all stakeholders and see how it could be practically implemented.

REFERENCES

- ALLAIS, STEPHANIE. 2007. Education Service Delivery: The Disastrous Case of Outcome-based Qualifications Frameworks. *Progress in Development Studies*. Vol. 7. No. 1. pp. 65–78.
- AUSTIN, TAMMY. 2014. *Goals 2000 – The Clinton Administration Education Program*. Retrieved 18 October 2014. Retrieved from: www3.nd.edu/rbarger/www7/goals200html
- BAUERSFELD, H. 1995. Language Games in the Mathematics Classroom: Their Function and Their Effects. In P. Cobb and H. Bauersfeld (Eds.), *The Emergence of Mathematical Meaning: Interaction in Classroom Cultures* (pp. 211–92). Hillsdale, US-NJ: Lawrence Erlbaum
- DONNELLY, KEVIN. 2007. Australia’s Adoption of Outcome-based Education – A Critique. *Issues in Educational Research*.
- EUROPEAN COMMISSION. 2012. *Commission Presents New Rethinking Education Strategy*. 2012-11-20. Archived from the original on 2013-02-12. Retrieved 2013-02-12.
- GLASERSFELD, E. 1989. Cognition, Construction of Knowledge, and Teaching. *Synthese*. Vol. 80. No. 1. pp. 121–40.
- KENNEDY, KERRY. 2011. Conceptualising Quality Improvement in Higher Education: Policy, Theory and Practice for Outcome-based Learning in Hong Kong. *Journal of Higher Education Policy & Management*. Vol. 33. No. 3. pp. 205–18. Doi:10.1080/1360080X.2011.564995
- KILLEN, ROY. 2000. *Outcome-based Education: Principles and Possibilities*. Unpublished manuscript, University of Newcastle, Faculty of Education. Retrieved on 16 January 2015, from: http://www.schools.nt.edu.au/curricbr/cf/outcomefocus/Killen_paper.pdf
- MOHAYIDIN, MOHD GHAZALI. 2008. Implementation of Outcome-based Education in Universiti Putra Malaysia: A Focus on Students’ Learning Outcomes. *International Educational Studies*. Vol. 1. No. 4. pp. 147–60.
- SPADY, WILLIAM. 1994. *Outcome-based Education: Critical Issues and Answers*. American Association of School Administration: Arlington, Virginia.
- . 1996. Why Business can’t Afford the Trashing of OBE. Northern Territory Department of Education. Retrieved 31 October 2002, from: www.schools.nt.edu.au/curricbr/cf/outcomefocus/OBE_and_business.pdf
- TUCKER, B. 2004. *Literature Review: Outcome-focused Education in Universities*. Learning Support Network, Curtin University of Technology. Retrieved October 19, 2004, from: <http://lsn.curtin.edu.au/outcomes/docs/LitReview.pdf>
- WERTSCH, J.V. 1997. *Vygotsky and the Formation of the Mind*. Cambridge.
- WILLIS, S. AND B. KISSANE. 1997. *Achieving Outcome-based Education*. Perth, Western Australia: Education Department of Western Australia.

Study of Examination and Achievement as Dimension of Psychological Stress among Science Students

NARENDRA KUMAR* AND RAJIVE KUMAR**

Abstract

This study attempts to assess the examination and achievement as dimension of psychological stress among senior secondary science students studying in different types of institutions. A sample of 631 students was randomly selected from the schools recognised by different boards in Meerut district. They were administered Psychological Stress Scale for Science Students (PSSSS) developed by the researcher himself. Mean, S.D., F-test and t-test were used to analyse the data. Results show that male and female science students do not differ significantly on psychological stress dimension examination and achievement. While significant difference was observed between rural and urban science students, rural science students were found to be more stressed than urban science students. Further, significant difference was observed among the students of different types of institutions. Highest psychological stress due to its dimension examination and achievement was found in the students of U.P. Govt. Aided Schools (GAS) and lowest in the students of Kendriya Vidyalayas (KVs). Similarly, significant difference was observed between the students of different types of boards UPB and CBSE, UPB and ISC. No significant difference was observed between the students of CBSE and ISC. Highest psychological stress due to examination and achievement was found in the students of UPB and lowest in the students of ISC.

* Assistant Professor, Department of Education, S.G.P.G. College, Sarurpurkhurd, Meerut, U.P.

** Assistant Professor, Department of Education, N.A.S. College, Meerut, U.P.

INTRODUCTION

Science is a process of development of physical and meta-physical world through interaction between human mind and universe. It is a continuous quest for new knowledge through investigation, observation and experimentation, which leads to new theories, new instruments and so on. It is a dynamic, changing, tentative and ongoing process. Understanding its conceptual and methodological concepts is an important part of learner or an educated person. The present scenario is coming up with technological revolution, web technology and web culture. Naturally, it is the achievement of people especially in the field of science besides humanities. It is a well considered opinion proven rationally that science is the great potential factor for the development of country. Hence, science education in every country occupies a significant emphasis. The very structured knowledge in science education demands good intellect people with scientific attitude and rationale mind. Difficulty in understanding of science experienced by students in general, fear of science and underachievement in science subjects are the common problems due to which students used to suffer. Science also exerts a number of additional demands on students. The science curriculum requires enormous commitment

and hard work by students. The intense curriculum may produce stress on science student's life. The school setup, teacher's expectations, infrastructure facilities, modalities of teaching, etc., promote the feeling of pressure associated with being in the science stream. Most of the time, science students complain of dwelling in between their efforts for better achievement and teacher's/parent's expectations. Even investing time and efforts is something they find difficult and therefore get easily stressed. It is being experienced by parents and teachers in schools that science students suffer from psychological stress which affects their achievement.

Students worry about selecting careers and post-schooling programmes. The problems encountered by students may differ from those faced by their non-student peers. Students are starting to shift from a life that is dependent on others to a life that needs them to release the dependency and start carrying their own responsibilities (Sulaiman *et al.*, 2009). A number of researches have been done looking at the correlation of many stress factors that science students experience and the effects of stress on their academic performance. Most of the studies in different responses to stress have been carried out in dental, medical, nursing, university and college students (Ellison, 2004; Polychronopoulou and Divaris, 2005; Hussain and Kumar, 2008, Kumar

and Singh, 2004, Kaplan Liu, and Kaplan, 2005, Chapell *et al.* 2005, Vijayalakshmi and Lavanya, 2006, Nicholson, 2009). Many scholars in the field of behavioural science have carried out extensive research on stress and its outcomes and concluded that the topic needed more attention. In addition, there are important sources of stress such as homework, curriculum transaction, assignments and uncomfortable classrooms, relationships with faculty members and friends, eating and sleeping habits, and time pressure may also be sources of stress. Examination and to achieve good scores is the major source of stress among science students. This refers to the stress among science students due to fear of exams, inadequate preparation for exams and also due to the fact that the science student is expected to achieve highly. The researcher found that there is not much research conducted particularly in Western U.P. in India pertaining to this issue with regard to the students of different types of institutions recognised by different boards. Therefore, it is timely to conduct a research to examine this particular issue. In the present study, the researcher attempted to assess the examination and achievement as dimension of psychological stress among senior secondary science students studying in different types of institutions.

OBJECTIVES

1. To study the nature of examination and achievement as dimension of

psychological stress among science students.

2. To study the difference between male and female science students on psychological stress dimension examination and achievement.
3. To study the difference between rural and urban science students on psychological stress dimension examination and achievement.
4. To study the difference among science students of different types of institutions on psychological stress dimension examination and achievement.
5. To study the difference among science students of different types of boards on psychological stress dimension examination and achievement.

RESEARCH METHODOLOGY

METHOD

Methods of research are generally determined by the theory of the topic under study, objectives of the study, resources of researchers, etc. These considerations have led the investigator to use the descriptive survey method of research for the present study.

PARTICIPANTS

For the present study, science students officially enrolled in 12th standard were taken from different types of institutions *viz.* Kendriya Vidyalayas (KVs), Jawahar Navodaya Vidyalayas (JNVs), U.P. Government Inter Colleges (GIC), U.P. Government Aided Schools (GAS), Public

Schools (PS), Christian Missionary Schools (CMS) and Army Schools (AS) recognised by different boards in Meerut district. Using simple random sampling, 100 senior secondary science students were selected from each type of institutions. Out of 700 science students, only 631 students were finally taken because 69 students did not fill the scale properly.

MATERIAL AND PROCEDURE

To achieve objectives of this study, Psychological Stress Scale for Science Students (PSSSS) developed by the researcher was used to measure psychological stress of science students. Each item was followed by five options, namely, 'Always', 'Often', 'Sometimes', 'Rarely' and 'Never'. Reliability of the scale was determined by split half-method and was found 0.96.

DATA ANALYSIS TECHNIQUES

To study the nature of examination and achievement as dimension of psychological stress, all the science students ($N = 631$), mean and standard deviation (S.D.) were calculated. To find out the differences among science students on examination and achievement as dimension of psychological stress, analysis of

variance (ANOVA) was used. In case of significant F-value, t-test was used. Results are presented in the following tables.

RESULTS

After analysing the data, it was observed that the mean, median and mode values of all the 631 science students on psychological stress dimension examination and achievement were found to be 24.727, 25 and 25 respectively, which indicate moderate level of stress among science students due to examination and achievement.

It is evident from Table 1 that t-values between the means of male and female science students on psychological stress dimension examination and achievement was found to be 0.76 which was not significant at 0.05 level of significance. This reveals the fact that male and female science students do not differ significantly on psychological stress dimension examination and achievement. It means that both male and female science students were found to be stressed equally due to psychological stress dimension examination and achievement.

Table 1

Summary of t-test for Difference between Male and Female Science Students on Examination and Achievement as Dimension of Psychological Stress

Dimensions of Psychological Stress	Male (N = 419)		Female (N = 212)		t-value
	Mean	S.D.	Mean	S.D.	
Examination and achievement	24.86	6.45	24.43	6.98	0.76

Table 2
Summary of t-test for Difference between Rural and Urban Science Students on Examination and Achievement as Dimension of Psychological Stress

Dimensions of Psychological Stress	Rural (N = 218)		Urban (N = 413)		t-value
	Mean	S.D.	Mean	S.D.	
Examination and achievement	26.38	6.47	23.84	6.55	4.64**

It is evident from Table 2 that t-values between the means of rural and urban science students on psychological stress dimension examination and achievement was found to be 4.64 which was significant at 0.01 level of significance. This reveals the fact that rural and urban science students

differed significantly on psychological stress dimension examination and achievement. Since mean differences were in favour of rural students, it indicates that rural science students were found to be more stressed than urban science students due to examination and achievement.

Table 3
Sums, Sum of Squares, Means and S.D.s of Science Students of Different Types of Institutions on Psychological Stress Dimension Examination and Achievement

Types of Schools	N	Sum	Sum of Squares	Mean	S.D.
KV	95	2113	51149	22.24	6.65
JNV	82	2166	60670	26.41	6.53
GIC	90	2354	64818	26.16	6.04
GAS	79	2157	61535	27.30	5.82
PS	98	2459	66021	25.09	6.67
CMS	96	2267	57425	23.61	6.40
AS	91	2080	51548	22.86	6.67

Table 4
Summary of ANOVA for Difference among Science Students of Different Types of Institutions on Psychological Stress Dimension Examination and Achievement

Source of Variation	Df	Sum of Squares	Mean Sum of Squares	F
Between	6	1978.30	329.72	8.002**
Within	624	25711.92	41.21	
Total	630	27690.22	** p < 0.01	

Table 4 indicates that F-value at 0.01 level. This means that was 8.002, which was significant students of different types of

institutions differed significantly on psychological stress dimension examination and achievement. This analysis shows significant difference among groups. To know the significance of difference between groups, t-values were calculated. Results of t-test for the stress dimension examination and achievement are given in Table 5.

It is evident from Table 5 that significant differences were obtained between the students of KV and JNV, KV and GIC, KV and GAS, KV and PS, JNV and GIC, JNV and CMS, JNV and AS, GIC and CMS, GIC and AS,

GAS and PS, GAS and CMS, GAS and AS, PS and AS on psychological stress dimension examination and achievement. No significant differences were observed between the students of KV and CMS, KV and AS, JNV and GAS, JNV and PS, GIC and GAS, GIC and PS, PS and CMS, CMS and AS on psychological stress dimension examination and achievement. It is also clear from Table 3 that highest mean on psychological stress dimension examination and achievement was found for the students of GAS and lowest for the students of KV.

Table 5
Summary of t-matrix for Difference between Science Students of Different Types of Institutions for Psychological Stress Dimension Examination and Achievement

Types of Schools	KV	JNV	GIC	GAS	PS	CMS	AS
KV	0	4.175**	4.161**	5.260**	2.956**	1.446	0.626
JNV		0	0.269**	0.905	1.330	2.866**	3.517**
GIC			0	1.247	1.136	2.765**	3.466**
GAS				0	2.307*	3.930**	4.571**
PS					0	1.565	2.288*
CMS						0	0.788
AS							0

Table 6
Sums, Sum of Squares, Means and S.D.s of CBSE, UPB and ISC Science Students on Psychological Stress Dimension Examination and Achievement

Types of Boards	N	Sum	Sum of Squares	Mean	S.D.
CBSE	303	7333	191803	24.201	6.890
UPB	169	4511	126353	26.692	5.948
ISC	159	3752	95010	23.597	6.400

Table 7
Summary of ANOVA for Difference among Science Students of Different Types of Boards on Psychological Stress Dimension Examination and Achievement

Source of Variation	Df	Sum of Squares	Mean Sum of Squares	F
Between	2	939.26	469.63	11.025**
Within	628	26750.96	42.60	
Total	630	27690.22	** p < 0.01	

It is depicted in Table 7 that F-value has come out to be 11.025, which was significant at 0.01 level. This means that students of different types of boards differed significantly on psychological stress dimension examination and achievement. This analysis shows significant difference among groups. To know significance of difference between groups, t-values were calculated. Results of t-test for psychological stress dimension examination and achievement are given in Table 8.

It is evident from Table 8 that significant differences were obtained between the students of CBSE and UPB, UPB and ISC on psychological stress dimension examination and achievement. No significant difference was observed among the students of CBSE and ISC on psychological stress dimension examination and

achievement. It is also clear from Table 6 that the highest mean on psychological stress dimension examination and achievement was found for the students of UPB and lowest for the students of ISC.

CONCLUSION

It is apparent from the findings of this study that examination and achievement has emerged as the major causing factor of stress among science students. Male and female science students were found to be equally stressed due to examination and achievement. Rural science students were found to be more stressed than urban science students due to examination and achievement. Significant differences were obtained among the students of KV and JNV, KV and GIC, KV and GAS, KV and PS, KV and CMS, KV

Table 8
Summary of t-matrix for Difference between Science Students of Different Types of Boards on Psychological Stress Dimension Examination and Achievement

Types of Boards	CBSE	UPB	ISC
CBSE	0	3.942**	0.915
UPB		0	4.525**
ISC			0

and AS, GIC and CMS, GIC and AS on psychological stress dimension examination and achievement. Highest mean on psychological stress dimension examination and achievement was found for the students of GAS and lowest for the students of KV. Further, significant differences were obtained among the students of CBSE and UPB, UPB and ISC on psychological stress dimension examination and achievement. Highest mean on psychological stress dimension examination and achievement was found for the students of UPB and lowest for the students of ISC.

In the end, it can be concluded that science students have been found experiencing stress due to examination and achievement. The reason for this is very obvious. Science students, as compared to arts students, are always pre-occupied with their performance in examination because science subject is comparatively difficult to grasp and understand. There is a consistent pressure on students' mind to secure maximum possible marks in exam. In today's competitive world, a race to achieve more and more marks is in progress. This is seen by the general mentality where even if a student achieves 90 per cent marks, it is not considered good enough. Overtly or covertly, this trend is reinforced by teachers, parents, neighbours, etc. Also, the admission process for the coveted advent into

higher education being difficult is critically dependent on achievement in terms of marks.

IMPLICATIONS OF THE STUDY

The findings of the present study may be utilised by educational planners and administrators in order to assess and modify their schemes pertaining to the development of science students. The findings of the study may be of immense interest to teachers, headmasters and principals to re-orient their efforts to help the students. Science students need to feel as a part of school. They should be involved in various activities and also be able to take up leadership roles like prefectorial positions. This is important so that students do not feel marginalised and isolated from the mainstream. The findings of this study are useful to the persons who are involved to consider the impact of the workload on students' welfare, and to prepare students for challenges in their life. The findings of this study will also be useful for parents because parents often feel stressed and frustrated too, but they must realise that the brains of teens are physically different from adults, they do not see things in the same way, and they react differently. Parents can help enormously by setting a good example, by being patient, by spending time with students and really listening to them.

REFERENCES

- CHAPELL, M.S., Z.B. BLANDING, M. TAKAHASHI, M.E. SILVERSTEIN, B. NEWMAN, A. GUBI, AND N. MCCANN. 2005. Test Anxiety and Academic Performance in Undergraduate and Graduate Students. *Journal of Educational Psychology*. Vol. 97. No. 2. pp. 268–74.
- ELLISON, K.W. 2004. *Stress and the Police Officer*, 2nd ed. Charles C. Thomas Publishers, Springfield, IL.
- HUAN, V.S., Y.L. SEE, R.P. ANG, AND C.W. HAR. 2008. The Impact of Adolescent Concerns on their Academic Stress. *Educ. Rev.* Vol. 60. No. 2. pp. 169–78.
- HUSSAIN A. AND A. KUMAR. 2008. Academic Stress and Adjustment among High School students. *J Indian Acad Appl Psychol*. Vol. 34 (Special Issue). pp. 70–73.
- KADAPATTI, M. AND P.B. KHADI. 2006. Factors Influencing for Academic stress among Preuniversity Students. *Indian Psychol. Rev.* Vol. 66. No. 2. pp. 83–88.
- KAPLAN, D.S., R.X. LIU, AND H. B. KAPLAN. 2005. School Related Stress in Early Adolescence and Academic Performance Three Years Later: The Conditional Influence of Self-expectations. *Soc. Psychol. Edu.* Vol. 8. No. 1. pp. 3–17.
- KHALID, R. AND S.S. HASAN. 2009. Test Anxiety in High and Low Achievers. *Pakistan Journal of Psychological Research*. Vol. 24. pp. 3–4.
- KOHLER, J.M., D.C. MUNZ, AND M.J. GRAWITCH. 2006. Test of a Dynamic Stress Model for Organisational Change: Do Males and Females Require Different Models? *Applied Psychology: An International Review*. Vol. 55. No. 2. pp. 168–91.
- KUMAR, S. AND A.P. SINGH. 2004. Stress State and Its Relationship with Academic Performance among Students. *Recent Trends in Human Stress Management*. pp. 55–66.
- NICHOLSON, A.M. 2009. Effects of Test Anxiety on Student Achievement (ACT) for College Bound Students. *Dissertation Abstract International*. DAI-A-70/07, AAT 3366126.
- POLYCHRONOPOULOU, A. AND K. DIVARIS. 2005. Perceived Sources of Stress Among Greek Dental Students. *Journal of Dental Education*. Vol. 69. No. 6. pp. 687–92.
- SULAIMAN, T., A. HASSAN, V.M. SAPIAN, AND S.K. ABDULLAH. 2009. The Level of Stress among Students in Urban and Rural Secondary Schools in Malaysia. *European Journal of Social Science*. Vol. 10. No. 2. pp. 79–84.
- VIJAYLAKSHMI, G. AND P. LAVANYA. 2006. Relationship between Stress and Mathematics Achievement among Intermediate Students. *Edutracks*. Vol. 7. No. 7. pp. 34–37.

Tactile Map Book for Students with Visual Impairments

A Step towards Inclusive Education in India

APARNA PANDEY*

Abstract

The paper highlights the significance of teaching-learning of Geography to students with visual impairments with the help of tactile maps for enhancing their map reading skills. The study reveals the status of teaching-learning of Geography to visually impaired in schools and availability of teaching-learning materials in Geography for students with visual impairments in the country. The development of an innovative tactile map book based on innovative technology for students with visual impairments and their responses on the map book bring some hope for future in qualitative improvement of teaching-learning of Geography. A conscious effort has been made to develop tactile map book in view of crucial pedagogical concerns related to the subject and of the learners.

INTRODUCTION

Geography is the study of relationship between humans and environment. It helps to understand the impacts of human behaviour on environment and *vice versa*. The skills and knowledge of the subject

acquired by students enable them to understand their own environment better and appreciate how it differs to others. Teaching Geography in school for blind and partially sighted children presents at the same time a challenge and a great responsibility.

* Associate Professor, Department of Education in Social Sciences, NCERT, New Delhi-110016.

Geography is of great importance for entire personal development of blind or partially sighted pupil (Brvar, n.d.). Children need to understand how to track effectively, follow verbal instruction and search independently (RNIB, n.d.). Mapping skills, like all tactile and scanning skills, need to be taught from an early age. Schnotz and Kulhavy (1994) rightly mentioned that when created with a purpose and used correctly in classrooms, graphics such as maps can serve as instruments that support learning and enable the learner to acquire meaningful and important information. In doing so, maps can and do serve an important instructional function. Developing an understanding of our world and the lives of its people is crucial for all students. Students with vision impairments may need extra help to fully access the subject like Geography. Stuart Snowdon (2003) believes that with a little forethought and imagination, and a few extra minutes spent on resources and planning, you should be able to offer a student who is visually impaired the opportunity to get the full benefit of a good geographical education. Geography offers blind and partially sighted young people essential tools for understanding the world they live in and lots of opportunity to develop useful transferable skills like coordinates on the map.

The world over, map work is one of the most challenging areas of school curriculum for blind and

partially sighted children and is important in Geography. However, a map in the form of simple directions and routes is a very valuable skill for a young person with vision impairment and is vital for her/his developing independent orientation and mobility. Students with vision impairments may have really lesser opportunities for incidental learning and the reinforcement of concepts and knowledge of the world around them. For example, even a passing glance at a flower pot gives a fully sighted child a wealth of images and information which may not be readily accessible to a child with sight impairments. For this reason, it is important to include as many multi-sensory 'real life' experiences as possible to enable blind and partially sighted children to develop a general understanding of the world. Sighted map readers take in the whole map at a glance. That overview helps them see details in context. But when fingers do the looking, they tend to take in the contents of the map one press of the fingertip at a time (Pennisi, 1992).

STATUS OF TEACHING-LEARNING OF GEOGRAPHY TO STUDENTS WITH VISUAL IMPAIRMENTS IN INDIA

Geography is one of the components of social science up to secondary level school curriculum in India. Social science subject incorporates History, Geography, Political Science and Economics from Classes VI to X. Generally, in all schools including government, semi-government and

private, only one subject teacher is supposed to teach all the four subjects in social science. It has been observed that in most of the cases, non-specialist in Geography is bound to teach the subject from upper primary to secondary stages. These teachers are not adequately prepared to teach map skills in the classroom during their pre-service education course to sighted students even, let alone blind or partially sighted. Apart from that, during interaction with teachers and visit to several teachers' training colleges and schools of the country, it has been observed that there is an acute shortage of teaching-learning materials in Geography for students with visual impairments. Moreover, Geography textbooks for visually impaired are generally available in Braille text only without any graphical images. Therefore, in order to explain a theme or topic, a teacher often prepares sketches, maps or diagrams with the help of hard boards, thread, wool, grains, pearls and metal pins, etc. Most of these materials are developed during pre-service special teacher education course and later used to display in the classrooms. These teaching-learning materials are neither accurate nor durable as far as their quality is concerned. One or two such materials may be seen displayed on the walls of classrooms in every special school. Since these materials are manually developed, therefore mass production of such materials are not feasible. In view of large number of students with visual

impairments, such materials are seldom used in the classroom during teaching-learning process. Besides, during question paper analysis of several state education boards and Central Board of Secondary Education (CBSE), it has been observed that maps-based questions are replaced by theory questions for blind students. This proves reluctance of school examination boards towards mapping skills in students with visual impairments as well as inability of teachers to transact map skills to the students due to unavailability of resources in the schools. Therefore, the main objective behind preparing the tactile map book was to supplement the teaching-learning materials for teachers and students with visual impairments for qualitative improvement of teaching-learning of Geography and to promote inclusive education in schools.

REVIEW OF EXISTING TACTILE MAP BOOKS

In order to assess needs of the students with visual impairments and to know about their difficulties with the currently available materials, a review meeting was organised with subject experts, special teachers and teacher educators at NCERT, New Delhi, during 2013. The interaction with teachers and teacher-educators (both sighted and visually impaired) revealed scarcity of tactile educational materials in the country. The review of tactile map books developed by

different organisations (national/international) was done on the criteria, such as physical structure of the map book (which includes size, shape, weight, quality of paper, binding), number of information on the map, methods used for information on the map, description of map in Braille (*Open/Contraction*), guidelines for users in the map book, language used in the map book (Braille, and text), integration of pedagogy with the content of maps and cost of the map book. It was found that in the special schools, teachers and educators did not have access to such materials. One of the map books was quite big in size and heavy. It was not easy to carry or handle the map book during classroom transaction but was suitable for resource room or library. The other map book was light in weight but binding was severely tight which made it difficult to open up. Tactile pictures or diagrams have to be very simple for a blind child to use effectively, since they need to be explored in a serial manner (Tobin *et al.*, 1997), whereas these map books have used some sheds or lines which could not be differentiated by visually impaired persons. One of the major characteristics of all the map books was that states of India were shown altogether on one sheet and later split in different sheets. Moreover, three or four states were clubbed together and were shown on one sheet in isolation, therefore visually impaired students could not relate the location of the states shown on separate

sheet with the map of India where all states were represented altogether. Besides, height of all sheds shown on the maps was same which made the distinction between them more complicated. More number of information on A4 size map was one of the major drawbacks of these map books. Descriptions of the maps were given in Braille and English or Hindi, but the contents were quite similar to any other geography textbook. In these map books, *Contraction Braille* was used to utilise more space for description, however, during review workshop, special teachers said that students of Classes VI to VIII have been introduced to *Open Braille*, which is comparatively easier. None of the map book had given instructions or guidelines for teachers or students before introducing the maps in the book. Preface of the map book included only the purpose and objectives of the development of the materials. It was observed that the plain description of maps in Braille in the map books could not engage students to learn the concept with interest. Above all, the map books developed in India were not available for purchase. And one map book, which was imported by an NGO, was available for about ₹ 5000. Keeping in view the quality of the maps, this map book was not worth purchasing even for libraries.

Keeping all the above in view, an initiative was taken by NCERT to develop a quality, user-friendly and cost-effective tactile map book for students with visual impairments. A

thorough review of literature available at national and international level was done for conceptualisation of the theme and design for the map book. The study materials and guidelines developed by Royal National Institute for Blind (RNIB), Blind Association of North America (BANA) and The Swedish Braille Authority, were studied in detail for simplification and conversion of 2-dimension to 3-dimension for tactile graphics and maps. Since these guidelines are based on several researches and experiences, therefore a few of them have been contextualised as per our need. The subsequent steps taken for development of the map book were introduction of simple diagrams in the beginning of the tactile map book which lead to develop spatial concepts like cardinal directions, scale, latitudes and longitudes among students. Keeping in view that a simple diagram which works may be far more effective than a beautiful diagram which is too complex, information for maps were prioritised to avoid visual overload. Activity given at the end of contents of each map and diagram ensure that the whole exercise is enjoyable. Since high levels of concentration are required to piece together information to create an overall mental map and the student must feel that what they are doing is worthwhile, hence, teachers must stimulate interest among students for things they are not aware of.

VALIDATION OF THE TACTILE MAPS AND DIAGRAMS

During development of the tactile map book, diagrams and maps were methodically tried out with students with visual impairments of special schools located in different parts of the country such as Government School for the Blind, Basishtha, Guwahati, Assam; the School for the Blind, Narendra Nagar; Ramakrisna Mission, Kolkata, West Bengal; Shri Hanuman Prasad Poddar Andh Vidyalaya, Varanasi, U.P; Bhima Bhoi School for the Blind, Bhubaneswar; the National Association for Blind (NAB), New Delhi; Saksham School, Noida; Special School for the Blind, Durtlang, Aizwal, Mizoram; Rajkiya Pragya Chakshu Andh Vidyalaya, Udaipur. Moreover, for improvement of the tactile maps information on maps and contents have also been upgraded and modified on the basis of views and feedback from special educators obtained during several meetings for development of materials for children with special needs and in-service teachers' education programmes conducted by NCERT at the national level. In this connection, Dr. G. Victoria, Professor, Department of Special Education, Faculty of Education, Avinashlingam Institute of Home Science & Higher Education for Women University, Coimbatore, comments that all parameters have been met for developing this material such as size of the map, scale, latitude, longitudes, sheds, number

of information on one page, etc. From all aspects, this map book is amazing (it) should reach all schools of the country. The tactile map book has been acclaimed by stakeholders too. However, there is always scope for improvement to provide quality materials to learners.

THE IMPORTANT FEATURES OF THE LATEST TACTILE MAP BOOK DEVELOPED BY NCERT

The review and analysis of the available study materials and interaction with students and teachers led us to believe that studying many diagrams and maps would be extremely exhausting for students who have not yet exposed to such materials. Therefore, technical aspects of tactile graphics were given due importance for better ways to present information. As per the guidelines of RNIB, size of the map should not exceed a handspan, Braille paper size map book was selected to develop the map book. Symbols for the maps were chosen carefully and were created with the help of moulds developed by 3D printers. One of the objectives of the development of the map book was to make it cost-effective to reach out to large number of students in the country. Hence, thermoform sheets were preferred over swell paper for making tactile graphics considering cost and durability. *Duxbury* software tools have been used for putting Braille labels on the maps and diagrams.

Themes of the map book were identified with the help of experts, teacher educators and special teachers, keeping in view basic concepts and over all curriculum at the upper primary stage in Geography in the country. Themes have been arranged in such a manner so that learners move from simple to difficult concepts or information. In the beginning of the tactile map book, clear step-wise guidelines have been given for teachers to develop fine psychomotor skills among students with visual impairments for making the best use of the map book.

All diagrams and maps have been presented in the map book in a graded and sequential manner, gradually blended with the conceptual development. It has been realised that difficulties in access to maps may be overcome if the map is broken down into component parts. For a congenitally blind child, concepts such as direction and scale are quite difficult. Therefore, the map book begins with the diagram of cardinal directions. Explanatory note of the diagram in Braille and English gives clear instruction to students how to identify directions by moving their fingers on raised lines. This kind of simplification, undoubtedly, has increased the number of maps, but considering the limitation of learners, maps have been modified for conceptual clarity. In all maps, India has been presented inside the rectangle. In

the beginning, the learners have been given instructions to move their fingers on rectangle and later boundaries of India to understand the difference between straight lines of rectangle and curved boundary lines of India. Due to striking difference in thickness and pattern of lines, students become familiar gradually with the international and peninsular boundary lines of India. To make students understand the extent of India on the map, latitudes (8° N and 36° N) and longitudes (68° E and 97° E) of maps have been marked with slightly raised thick point and Braille at the outer margin of rectangle.

Other themes of the tactile map book include scale, latitudes, longitudes, outline map of India showing distinct international and coastal boundaries, political map of India, physiographic divisions, India and its neighbours, and continents and oceans. Considering the limitation of learners, maps have been split-up in parts for better comprehension and conceptual clarity. Though it is a complex process to move fingers from one piece of information to another, returning to check the relationship of the pieces and then build a mental picture of how the pieces 'fit' together. In this context, political map of India with administrative boundaries of states was split in eleven sheets. On each sheet 2-3 new neighbouring states have been introduced inside the boundary of India, so that location and association may be established among states within the

boundary of India. It is expected that this kind of organisation of states on different sheets will develop in the learners a sense of space, direction and place. However, keeping in view the small size of north-eastern states and difficulty to distinguish the boundary lines of each state inside the boundary of India, the location of these states has been shown on separate sheets. Name of each state in code has been written in Braille within the state boundaries.

Therefore international, national and state boundary lines, sea and land surface, etc., could be easily differentiated with the touch. The map of rivers shows only a few major rivers of the country, the uniqueness of this map is that unlike other tactile map books it shows direction of flow of each river by including a raised point at the origin place of the river. On any ordinary map, sighted students can very well identify the direction of flow by noticing arrows along with the river. But in the tactile map book, arrow mark along with the river creates confusion among students, therefore after several attempts of trial and error a raised point with specific size was identified to show the origin of the river which has been very much appreciated by students and teachers of special schools. Similarly, information given on one map, major physiographic divisions of India, *i.e.*, mountains, plateaus and plains has been again split-up into three maps for the convenience of the learners because these learners observe the

map through their fingers, gradually and in pieces and form a mental image. It is difficult to comprehend several information on one visual. Description of each diagram and map has been given in Open Braille instead of *Contraction Braille* keeping in view that Braille requires a quite precise tactual discrimination ability, and the highly contracted nature of Standard English Braille with its complex rules governing the use of the contractions and with many of its signs having multiple meanings, cannot but impose substantial cognitive demands upon the learner (Tobin *et al.*, 1997). Use of Braille and English on the same page in the map book helps both sighted students and visually impaired to read the map book together and helps to promote inclusive education environment in the classroom. While developing description of the maps, emphasis has been laid on integration of pedagogy with the contents, hence, explanatory notes along with each diagram and map includes clear instructions in lucid language for students to find the location and characteristics of features by moving their fingers on specific part of the map. Each map and diagram of the map book incorporates an interesting and simple activity which encourages learners to locate the exact place on the map. Another important aspect which makes this map book more usable among stakeholders is availability of its audio CD in both Hindi and English versions. Moreover, the audio versions have been developed digitally in *Daisy* format which allow learners

to navigate any topic or activity of the map book directly on computer.

THE WAY FORWARD

India has about three crore disabled population and more than fifty lakh visually impaired persons as per Census 2011. UNESCO (2015) in its report entitled *Education 2030, Towards Inclusive and Equitable Quality, Education and Lifelong Learning for All*, emphasises that we therefore commit to making the necessary changes in education policies and focusing our efforts on the most disadvantaged, especially those with disabilities, to ensure that no one is left behind. The union government policies to promote universal education and 'zero rejection' under *Sarv Shiksha Abhiyan* (SSA), Inclusive Education for the Disabled at Secondary Stage (IEDSS) and *Rashtriya Madhyamik Shiksha Abhiyan* (RMSA) are certainly positive steps in improving the quality of education for students with visual impairments in inclusive set up at schools. Currently, many of the students are unable to pursue subjects like Geography after Class X because of lack of good diagrams and maps explaining concepts. Introduction of cost-effective tactile map book may create a noticeable improvement in the quality of education. It will also promote the demand for tactile maps and graphics in all subjects from primary to higher secondary stages of school education. The enthusiasm

and eagerness among students with visual impairments towards education make us believe that these children can get just as much out of learning about the environment, different places as a sighted person, so it is important that all investments — current and new — should be screened against a key criterion: do they help in ensuring that all people, including the most

marginalised and vulnerable, acquire the knowledge, attitudes and skills they need for their lives and livelihoods and for the full realisation of their right to education? (UNESCO 2015). All students may be fully included and encouraged in mapping skills through Geography education in schools, and teachers can make a major contribution to the improvement of student-learning outcomes.

REFERENCES

- BRVAR, ROMAN. n.d. *Geography in a Different Way*. Institute for Blind and Partially Sighted Children, Slovakia. Available at: <http://icevi.org/publications/ICEVI-WC2002/papers/11-topic/11-brvar.htm>
- PENNISI, ELIZABETH. 1992. *Talking Maps*, *Science News*. Vol. 142. No. 23. pp. 392–93. Society for Science & the Public.
- ROYAL NATIONAL INSTITUTE OF BLIND PEOPLE (RNIB). n.d. *Teaching Geography to Pupils with Vision Impairment*, Effective Practice Guide. Available at: rnib.org.uk/curriculum
- SCHNOTZ, W. AND R.W. KULHAVY. 1994. *Comprehension of Graphics*. North-Holland Elsevier Science B.V., Amsterdam, Netherlands.
- SNOWDON, STUART. 2003. Teaching Geography to Students with A Visual Impairment. *Teaching Geography*. Vol. 28. No. 1. pp. 20–24. Geographical Association.
- TOBIN, MICHAEL J., NICK BOZIC, GRAEME DOUGLAS, JOHN GREANEY AND STUART ROSS. 1997. Visually Impaired Children: Development and Implications for Education. *European Journal of Psychology of Education*. Vol. 12. No. 4. Special Issue: Children with Special Needs, pp. 431–47.
- UNESCO. 2015. *Education 2030, Towards Inclusive and Equitable Quality, Education and Lifelong Learning for All*. Incheon Declaration.
- VERDI, MICHAEL P. AND RAYMOND W. KULHAVY. 2002. Learning with Maps and Texts: An Overview. *Educational Psychology Review*. Vol. 14. No. 1. pp. 27–46.

Some Transactional Aspects of School Internship in Diploma in Elementary Education Course in India

VIPIN KUMAR CHAUHAN*

Abstract

The course of Diploma in Elementary Education (D.El.Ed.) aims at preparing teachers to impart quality education at elementary level, i.e., Grade I–VIII. Since the agreement on universalisation of elementary education and further due to compliance to the Right to Education Act, 2009, imparting elementary education has become more challenging in India as it has entrants from different socio-cultural context with a vast majority of first generation learners. This has spawned the need for preparing teachers who could facilitate learning processes that enable every child to learn and achieve her/his optimum potential. For this, the teacher must have a thorough understanding of child, learning processes and rights of the child. This requires a teacher to observe experiment and reflect on her/his transactional effectiveness and learning apart from having acquired knowledge of nature, content and pedagogy of subjects. The ‘School Internship’ in D.El.Ed. curriculum, comprising 80 working days across the course, provides the teacher an opportunity to connect with school and acquire desirable learning to develop herself/himself as a professional practitioner. The study investigates whether this element of ‘School Internship’ in the course has been successful in achieving the anticipated objectives. The primary analysis reveals that there are numerous individual and institutional negotiations that reduce the potentiality of school-based learning for student-teachers.

* F-10, Friends Enclave, Defence Colony Road, Dehradun- 248001, Uttarakhand.

INTRODUCTION

Teacher preparation programmes have been a core concern for academicians and education administrators. Studies have revealed that isolated events like trainings, workshops and seminars have little impact on the learning of teachers (Gallimore, Erneling, Saunders, and Goldenberg, 2009). In contrast, when the teacher preparation programme includes school-based learning, the teachers are likely to become better professionals (Desimone, 2009; Garet, Porter, Desimone, Birman, and Yoon, 2001) as the belief of teachers, the classroom environment and school contexts collectively shape the learning of teachers (Strom, 2013). There are evidences which claim that the student-teachers who teach in school during teacher preparation programme acquired the ability to raise learning level of students (National Research Council, 2010; Boyd, Grossman, Lankford, Loeb, and Wyckoff, 2009). However, there seems a great need to further explore how multiple variables work together in school setting to affect teacher learning (Opfer and Pedder, 2011). The findings from several studies advocate the role of school-based learning as a linchpin for preparing professional teachers that could significantly contribute in learning of children.

This paper examines how the Diploma in Elementary Education (D.El.Ed.), the elementary teacher preparation programme in India

has recognised the need for school-based learning. The course has got significant space for school-based learning known as School Experience Programme, School Internship, etc., in different states. The principle behind the thought is to break the linear conception of teaching and transform it into a theory-practice dyad. To facilitate this inquiry, this study analyses the 'school internship' element of D.El.Ed. course developed by National Council of Teacher Education (NCTE), State Council of Educational Research and Training (SCERT) of Uttarakhand, Delhi and Bihar, and State Institute of Education (SIE) of Chandigarh, to enquire the scope of school-based experiences to preparing student teachers as professional practitioners.

OVERVIEW OF SCHOOL INTERNSHIP IN D.EL.ED. COURSE

In India, the National Council of Teacher Education is the nodal agency responsible for teacher preparation curriculum. It has developed a two-year curriculum with two phases of school internship, each of 45 days during both the years. The curriculum, as one of its element, focuses on teacher preparation through experiential learning by observing school practices, evaluating resource material and reflecting on practices in the first year, and by performing role as a regular teacher with critical reflections on own learning in the second year. To improve this further, partnership between school and

DIET has been emphasised upon to effectively facilitate the process of school internship. Taking insights of the national level curriculum of teacher preparation, different states have used either the curriculum as it is or by modifying some part of it (Curriculum Framework, D.El.Ed., 2015, pp. 132–36).

The school internship programme in Bihar is known as School Experience Programme (SEP). The student-teachers are supposed to engage with schools for 40 working days every year throughout the two-year D.El.Ed. course. The curriculum does not make any segregation on the roles of student-teacher as observer or as practitioner. The student-teachers are expected to facilitate at least 80 lesson plans each year. They will also identify school level problem(s) and conduct action research to systematically resolve at least one problem/issue which they finally have to submit to concerned faculty of DIET. It is also suggested for student-teachers to prepare school development plan on the basis of analysis of school level secondary data and also using their personal experience for the same school (Curriculum and Syllabus, D.El.Ed., 2013, pp. 113–16).

In Uttarakhand, the overall duration of 80 days for school internship, 35 days for the first year and 55 days for the second year, is aimed at experimenting with the learning gained by the student-teachers at DIET so that they could

effectively prepare themselves for their actual professional responsibilities as regular teachers. The format of engagements for both the years is different during school internship. While the first year primarily focuses on observational learning, evaluation of existing resource materials and sharing reflections at appropriate platforms, the second year is to perform all the roles as regular teachers in the school which also includes attending meetings of school management committees and block and cluster level meetings. Action research is also expected from student-teachers in the fourth semester (D.El.Ed. Curriculum, 2014, Uttarakhand, pp. 129–30).

State Institute of Education (SIE), Chandigarh has viewed school internship as a structured partnership between the school and SIE where the intern must function as a regular teacher, for which she/he needs to be provided physical space as well as pedagogical freedom to innovate. Quite similar to the curriculum of NCTE, the intern, in her/his first year, will focus on understanding school, its environment, children and the teaching-learning process, whereas in second year, she/he will function as a regular. The objectives for internship exactly match with what is already suggested by NCTE except one, i.e., “To participate in teaching school subjects to the children of Classes I to V”. However, it has been clearly mentioned in background note that the student-teacher will

perform the role of a regular teacher. It says, "In the second year, the intern will function as regular teacher but with support of teacher-education institution in the form of guidance from and dialogue with faculty supervisors" (Syllabus, D.El.Ed., SIE Chandigarh, n.d., pp. 34, 80–81).

The School Experience Programme (SEP) in Diploma in Elementary Education developed by SCERT, New Delhi has been allocated 40 working days in each year, which have been further distributed in three phases of 5, 20 and 15 days' each. The DIETs have also provisioned a five-day orientation programme on SEP to discuss all its key components like objectives, lesson planning, assessment, conducting school profile, writing reflective diary, conduct action research, etc. Unlike other three states, they have placed student-teachers under the overall control of heads of the school (Curriculum and Syllabus, D.El.Ed., SCERT, Delhi, 2014 pp. 128–34).

In all the states, the duration of school-based learning is almost similar; however, there are variations in visualising this time period in terms of its execution. Also, the primary role of teacher-educator is to mentor and monitor the student-teachers throughout the school experience programme.

SCHOOL INTERNSHIP — WHAT MATTERS BUT DOESN'T EXIST?

School-DIET Partnership: Every student-teacher has to spend at least

80 working days in a government school to internalise school level processes as well as practice as a regular teacher. To make it a meaningful experience for them, the DIET must have structured partnership with internship schools so that schools also equally own the school internship component of the course, and provide student-teacher desirable space to learn as well as to perform. Concerned institution and the internship schools jointly have to map out the roles of each other to systematically and effectively support the student-teachers during their tenure at internship school as well as articulate student-teachers' engagements in the school. The prevalent practices lack any such kind of structured partnership between DIET and schools and the faculty members at DIET simply communicate to the schools through a formal letter to allow student-teacher in the school for the expected duration. The curriculum by the NCTE, SIE, Chandigarh and SCERT clearly mentions it but does not elaborate it further. The curriculum prepared by SCERT, Delhi clearly mentions about the ownership of SEP schools so that schools could work with student-teacher collaboratively and enable student-teachers to prepare them as professional teachers.

Internship Schools: There is mostly uniformity in allocating schools to student-teachers by DIETs. It has been seen that individual and institutional factors often

influence decisions while allocating internship schools for individual student-teachers, thus negotiating with the quality of internship. In many institutions, the student-teachers are allowed to choose any government school in the vicinity of their current residence so that visiting the school is convenient to them. There are also evidences where institutions identify schools with inadequate teaching staff so that the issue of teacher inadequacy could be addressed temporarily. These practices somehow derail the idea of school internship. Bryk, Cambum and Louis (1999) found out several factors that facilitate professional community, including social trust among teachers, school size and principal leadership. Building on this work, Bryk *et al.* (2010) argued that schools that have better learning environments for teachers are also providing better learning environment for students. Kraft and Papay (2014) also revealed in their research that teachers improved at faster rate, as measured by student test score gains, while working in schools with better environment. Jackson and Bruegmann (2009) demonstrated that teachers become better teachers in higher achieving schools because they have more efficient colleagues from whom they can learn effective instruction. The prevalent practices for school selection are non-systematic in terms that they do not primarily aim at strengthening professional capacity

of teacher. The study on “*What are the school types that matter for school internship*” reveals that the school leadership, classroom environment, and teacher beliefs collectively shape teacher-learning (Zeichner and Gore, 1990). This highlights the need to allocate student-teachers potential schools who have desired school characteristics so that they could prepare themselves as professional teachers.

Frameworks for Year One and Year Two School Internship: The D.El.Ed. course has two phases of school internship, one in each year. School internship during Year-One primarily focuses on school observation, evaluation of resource material (including textbooks) and reflection sharing, whereas student-teachers are expected to perform their role as a regular teacher during Year-Two school internship. This idea seems worthy in terms of easy mentoring and monitoring, engaging all the teachers keeping out any complexity in the process and implementing school internship smoothly. The study carried out by Candice Bocala has argued for this idea. The study revealed that the teachers who have rich experience of teaching, always prefer to experiment their knowledge in the field. In contrast to this, the teacher coming for the course without any teaching experience, wants to observe actual practices in field. If we agree with this study, the idea of simply putting all the student-teachers in a common

template maybe useful for some, but not for all because in D.El.Ed. course, students come from diverse background where some of them already have exposure to teaching while others are novice. As the primary objective of school internship is preparing professional teachers, it will be important to look into what suits to each student-teacher and place her/him in internship accordingly.

Frameworks for Mentoring and Monitoring: The visualised primary roles of faculty members of DIETs are to mentor and monitor student-teachers' practices during internship. The faculty members visit schools and discuss the experience of student-teachers. It is noteworthy that the decision of what to mentor and what to monitor lies with the individual faculty members. The absence of any common framework at DIET level leads to complete absence of space for mutual sharing amongst faculty members visiting different schools and interacting with student-teachers. Having a common understanding on principles of mentoring and monitoring will better enable faculty members of DIET to systematise mentoring and monitoring during school internship. It becomes even more essential in cases where the DIET faculty members themselves have not been prepared/trained adequately for such roles (This is a different aspect but nevertheless pertinent to the issue being discussed).

School Internship and Action Research: Action research in the school is being considered as a key element that can contribute in capacity development efforts of any practitioner. The guidelines document on restructuring and reorganising the centrally-sponsored scheme on teacher education (2012) in India strongly recommends for action research at school and DIET level. It has also been reflected in D.El.Ed. curricula of all studied states except the curriculum suggested by NCTE. The student-teacher during their internship will identify problem and resolve it through action research. Placing it in school internship without proper induction on action research becomes a burden for the students that merely engages student-teachers without any linkages with their professional development.

Orientation on School Internship: The curriculum developed by SCERT, Delhi has given due attention to prepare student-teachers through a five-day orientation on what and how the student-teachers will be doing during school internship. This preparatory phase is missing in all other studied states' curriculum. In such case, either it is conducted by negotiating with school internship working days or by manipulating with the content of other similar core components of the course.

Primary Impressions of School Internship: The time space given to the course, 80 working days for both the year, clearly indicates

the recognition of importance of school-based learning in preparing professional teachers across all states. The interaction with concerned faculty at DIETs and student-teachers reveals that the allocated time is actually used for the same purpose. But, the content detailed out in the curriculum for school internship points out the difference between school internship and other component of D.El.Ed courses. While the courses other than school internship have been detailed out in a thoughtful model that includes rationale, design of the course, objectives, detailing of content, mode of transaction, practical exercises, assessment and list of reference material, this model is missing for school internship. There is hardly anything about content, framework for implementation of school internship and reference material to better understand the usefulness of school internship. This is an indication of the ignorance of the importance of school internship and dominance of other components in the course.

CONCLUSION

Teaching has been considered as a non-linear practice. Teaching has also been viewed as an assemblage that is shaped by teachers' belief, school context and classroom environment collectively. This point of view strongly advocates for pivotal role of school-based experience

that would significantly contribute in preparing student-teachers as professional practitioners. The time space generated in the course is acknowledgeable but it must be planned systematically. The DIET-School partnership must be established with a common understanding and defined achievable. The states must have an operation plan to implement it in expected manner even if there is a lack of qualified faculty members in many DIETs. The faculty members need to chalk out how the individual teachers should be sent to school so that she/he get maximum opportunity for learning and experimenting. Each and every engagement needs to be reviewed in the terms that it contributes to professional development of student-teachers. Clarity on mentoring and monitoring, role of action research in school internship, content designing in curriculum will further strengthen the idea of school internship.

WAY FORWARD

The primary purpose of this study was to focus attention on transactional strategy of school internship. There is further need to inquire into other important aspects also like clarity of objectives as some of them are simply activities; possibility of distraction due to huge expectation from student-teachers in each internship phase, assessment of student-teachers which is mostly based on perception of mentors and documentation by

student-teachers, etc. Studying these aspects may better support in strengthening the efforts of teacher preparation programmes.

REFERENCES

- BOYD, D., P. GROSSMAN, H. LANKFORD, S. LOEB, AND J. WYCKOFF. 2008. *Teacher Preparation and Student Achievement*. National Bureau of Economic Research, 1050 Massachusetts Avenue Cambridge.
- BRYK, A., E. CAMBRUM, AND K.S. LOUIS. 1999. Professional Community in Chicago Elementary Schools: Facilitating Factors and Organizational Consequences. *Educational Administration Quarterly*. Vol. 35. No. 5. pp. 751–78.
- BRYK, A., P. SEBRING, E. ALLENSWORTH, J. EASTON, AND S. LUPPESCU. 2010. *Organising Schools for Improvement: Lessons from Chicago*. Chicago, IL: University of Chicago Press.
- BOCALA, CANDICE. *Learning Innovations*, WestEd, 300 Unicorn Park Drive, Woburn, MA 01801, USA.
- CURRICULUM FRAMEWORK, DIPLOMA IN ELEMENTARY EDUCATION (D.EL.ED.). 2015. National Council for Teacher Education. pp. 132–36.
- CURRICULUM AND SYLLABUS, DIPLOMA IN ELEMENTARY EDUCATION. 2013. SCERT and UNICEF Bihar. pp. 113–16.
- CURRICULUM AND SYLLABUS, DIPLOMA IN ELEMENTARY EDUCATION. 2014. SCERT, Delhi. pp. 128–34.
- CURRICULUM, DIPLOMA IN ELEMENTARY EDUCATION. 2014. SCERT Uttarakhand. pp. 129–30.
- DESIMONE, L.M. 2009. Improving Impact Studies of Teachers' Professional Development: Toward Better Conceptualizations and Measures. *Educational Researcher*. Vol. 38. 191–99.
- GARET, M.S., A.C. PORTER, L. DESIMONE, B.F. BIRMAN, AND K.S. YOON. 2001. What Makes Professional Development Effective? Results from a National Sample of Teachers. *American Educational Research Journal*. Vol. 38. No. 4. pp. 915–45.
- GALLIMORE, R., B. ERNELING, W. SAUNDERS, AND C. GOLDENBERG, 2009. Moving the Learning of Teaching Closer to Practice: Teacher Education Implications of School-Based Inquiry Teams. *Elementary School Journal*. Vol. 109. No. 5. pp. 537–53. DOI:10.1086/597001
- GOI. 2012. *Restructuring and Reorganizing the Centrally Sponsored Scheme on Teacher Education Guidelines for Implementation*, New Delhi, India.
- JACKSON, C.K. AND E. BRUEGMEANN. 2009. Teaching Students and Teaching Each Other: The Importance of Peer Learning for Teachers. *American Economic Journal: Applied Economics*. Vol. 1 No. 4. pp. 85–108.
- KRAFT M.A. AND J.P. PAPAY. 2014. Can Professional Environments in Schools Promote Teacher Development? Explaining Heterogeneity in Returns to Teaching Experience. *Educational Evaluation and Policy Analysis*. Vol. 36. No. 4. pp. 476–500.
- NATIONAL RESEARCH COUNCIL. 2010. *Preparing Teachers: Building Evidence for Sound Policy*. Report by the Committee on the Study of Teacher Preparation Programs in the United States. Washington, DC: National Academies Press.

- OPFER, V. AND D. PEDDER. 2011. Conceptualizing Teacher Professional Learning. *Review of Educational Research*. Vol. 81. No. 3. pp. 376–407.
- STROM, K. 2013. *Negotiating Learning and Practice in the First Year of Teaching*. Paper presented at the American Educational Research Association Annual Meeting, San Francisco, CA.
- STATE INSTITUTE OF EDUCATION (SIE). Syllabus, Diploma in Elementary Education, Chandigarh.
- ZEICHNER, K. AND M. GORE. 1990. Teacher Socialization. In R.W. Huston (Ed.), *Handbook of Research on Teacher Education*. New York, NY: Macmillan.

Newly Appointed CRCCs in Koraput District of Odisha Perceptions, Problems and Promises

MANORANJAN PRADHAN* AND CHANDRAKALA BAGARTI**

Abstract

Educational status in tribal and rural pockets of Odisha, in terms of literacy or enrolment, retention, participation and achievement in different stages of education, are not at par with national level. Particularly in tribal Odisha, low literacy rate, comparatively high dropout rate, low learning achievements of students, poor infrastructural facilities in schools, inadequate number of teachers as per RTE norm, language difficulties, etc. still remain as major challenges. Recently, 101 Cluster Resource Centre Coordinators (CRCCs) in 13 blocks were appointed for looking after the elementary education in Koraput, a tribal dominated district of Odisha. The present paper is an attempt to know the visions of the newly recruited CRCCs about their new assignments. To know the status of different clusters from the newly recruited CRCCs, a self-prepared questionnaire was administered and data were analysed following descriptive method. It is expected that the paper will help the policy makers to think seriously about the education of children in tribal and rural areas as per suggestions given by the newly recruited CRCCs from their experiences as teachers of these areas for not less than ten years.

* Teacher Educator, DIET, Koraput at Jeypore-764001, Odisha.

** Pedagogy Co-ordinator, SSA, Koraput-764020, Odisha.

BACKDROP

Koraput district is one of the tribal dominated districts of Odisha covering the largest variety of tribal groups with high concentration of tribal population. As per the 2011 census, the total population of the district is 13,76,934. Out of which, 5,85,830 (49.62 per cent) population belonged to Scheduled Tribe category. It means around half of the inhabitants are from tribal community. The literacy rate of the district as per the 2011 census is 49.87 per cent (male: 61.29 female: 38.92 per cent), as against 72.87 per cent literacy at state level and 73.0 per cent at the national level. In the state as well as in Koraput district, Scheduled Tribes have lower levels of literacy. In Odisha, the literacy rate of ST category as per 2011 census is 52.24 per cent which is 20 per cent lower than state literacy rate. Similarly, in Koraput district, the literacy rate of ST population is extremely lower than their counterparts' general category. In the state, the dropout rate at elementary stage has remarkably decreased to 3.07; but it is 4.7 among STs in 2012. According to Odisha Primary Education Programme Authority (OPEPA), the overall dropout rate at upper primary level is highest in Koraput district. According to ASER 2014, the learning achievements of the students in KBK (10 scheduled districts having relatively high ST population) are comparatively low.

Besides, low literacy and low achievement levels of learners at

elementary, secondary and higher education stages, several socio-economic issues are also very urgent to be addressed. Maoist issue is also a great concern of the district. But, all issues can be successfully addressed through better education system because education is an important indicator of human development as well as socio-economic development of a region. The state government has accorded a high priority for spread of education with special focus on primary education. The *Sarva Shiksha Abhiyan* (SSA) in the district of Koraput is also taking constructive steps to reach elementary education at every doorstep ensuring quality education. For that, like other districts of the state, to provide academic supports to the teachers at elementary level, recently 101 CRCCs (Cluster Resource Centre Coordinators) are appointed by the district administration through rigorous selection procedure. Their responsibility is to facilitate the teachers on pedagogical and academic front. They are supposed to be the best channel of communication between school and administration, teachers/head master and authorities, parents/public and local authority. Monitoring and supervising the schools, looking after teaching-learning process, providing necessary feedback to teachers, chalking out plans (short and long) for schools of the cluster, requisition and supply of textbooks, TLM (supplied) and others are the prime responsibilities of the

CRCCs to be undertaken. Besides, arrangement of local specific need-based orientation and training for teachers, developing supplementary text material keeping in view local needs of pupils with the prior advice and support of DIET/TTIs are also the duties and responsibilities of the CRCCs. Keeping in view this backdrop, the investigator tried to know the newly recruited CRCCs about their vision, challenges, basic problems and their suggestive remedies to address several issues associating the elementary education.

OBJECTIVES

- To know the visions of newly recruited Cluster Resource Centre Coordinators (CRCCs) about the schools in their clusters.
- To identify and list out the major challenges before the newly recruited CRCCs in their cluster.
- To study the strategies of the CRCCs to meet the major challenges before them in their clusters.
- To study the perceptions of the CRCCs about a(n) model /ideal school.
- To list out the factors accountable for low learning achievements of the learners in Koraput district of Odisha.
- To study their suggestions and remedies to check the problems of low learning achievements of the learners.

DESIGN

The district administration has newly recruited the CRCCs from among the

experienced teachers for different clusters following systematic and strict selection procedures. At the outset, the experienced regular elementary school teachers applied for the posts. Then the District Project Coordinator Office short listed and uploaded the admission letters of the eligible candidates for written examination in terms of Visioning Test. The question papers for the vision test were prepared by DIET faculties following the guidelines of OPEPA (Odisha Primary Education Authority). The nature of question papers was descriptive consisting of both pedagogical and content-based questions. Some questions were also for testing the vision of teachers to be CRCCs. Then candidates having high scores in written test were called for interview and selected as per the requirement of the districts. Then SSA, Koraput organised an induction level training to the newly recruited CRCCs with the cooperation of DIET. After inaugural sessions, to know the perceptions and visions of them, some questions were asked and they were instructed to give their response in written. A booklet-type questionnaire was given to them encompassing the following questions:

- What is your vision for schools in your cluster as a CRCC?
- How can you materialise your visions /dreams?
- What are the major challenges before you, being the newly appointed CRCC of your cluster?
- How can you face these challenges?
- Which school can be considered by

you as a model or an ideal school for your cluster?

- To which aspects/areas you will give more priority in your cluster?
- Low learning achievement of learners is a major problem in the schools of Koraput district. In your opinion, which factors are accountable for this?
- What are your suggestions and remedies to solve/check the above problem of the learners?

SAMPLE

All the newly recruited CRCCs were the sample of the study. The sample

consisted of 101 CRCCs from 13 blocks of Koraput district of Odisha. Among the CRCCs, 24 of them have teaching experience of 10 to 15 years while 37 and 40 among them have already worked as teachers in the district from 16–20 years and 21–30 years respectively. Besides, all the CRCCs are trained and some are highly qualified. The sample distribution citing number of CRCCs recruited block-wise, their educational and professional qualifications and teaching experiences as teachers in elementary schools of the district is given in Table 1.

Table 1
Distribution of Sample

Blocks	No. of CRCCs	Educational Qualification			Teaching Experience (in Years)		
		+2 CT	+3 BEd	PG BEd	10–15	16–20	21–30
Jeypore	09	3	3	3	2	3	4
Koraput	10	3	4	3	2	5	3
Kotpad	06	2	4	0	0	0	6
Nandapur	11	7	4	0	3	5	3
Kundra	02	1	1	0	0	0	2
Borriguma	10	2	5	3	6	3	1
Laxmipur	07	2	5	0	2	5	0
Boipariguda	09	2	6	1	0	5	4
Bandhugam	03	3	0	0	1	2	0
Lamtaput	10	6	4	0	3	3	4
Semeliguda	10	4	4	2	1	4	5
Dasmantpur	08	2	5	1	4	1	3
Potangi	06	1	2	3	0	1	5
Total	101	38	47	16	24	37	40
Grand Total	101	101			101		

DELIMITATIONS

1. The study was conducted on 101 experienced teachers-cum-CRCCs of mainly 13 blocks of a tribal-dominated district of Odisha namely, Koraput.
2. The teachers included in the sample were trained Graduates and Post Graduates.
3. The teaching experiences of the CRCCs as teacher were between 10 and 30 years.
4. The sample size was small for broad generalisation.

DATA COLLECTION

Required data for the study were collected from 101 newly recruited CRCCs from 13 blocks (out of 14 blocks of the district) using self-prepared questionnaire. The questionnaire consisted of two parts. The first part was meant for personal information reflecting name, gender, age, educational qualification, teaching experience, block under which the cluster comes, etc. The second part consisted of seven questions intended to know the dreams/visions of CRCCs for their new assignment, the major problems or issues which would create problem, the strategies to face the challenges, perceptions about an ideal school, area of importance, issues concerning low achievements of the learners and their suggestive remedies to uplift the low achievers. The questions were open to answer but specific space was allowed to write their views/opinions/suggestions. It means the questionnaire was

prepared in booklet form. Besides, the investigator personally discussed with the CRCCs regarding several issues associating quality education, better learning achievements of the learners, practical problems in schools and others. The data collected were analysed and interpreted using descriptive/qualitative techniques.

DISCUSSION AND FINDINGS

Analysing the data collected, the following discussion and findings were made.

OBJECTIVE 1: DREAMS AND VISIONS OF CRCCs

The first question asked to the newly recruited CRCCs was, "What are your visions/dreams for your schools as a CRCC?". They responded in the following ways:

- Preparing a database of the schools reflecting students' enrolment and attendance, their learning achievements (CCE pattern), teachers' position (no. of teachers, gender, social category, their qualifications, teaching experience, service condition, area of specialisation — scholastic and co-scholastic area, training or workshop attended, etc.), physical and infrastructural facilities available, organisation of co-curricular activities, status of SMC, learners' learning achievement, library and TLM corners, etc.
- Constructive steps to create learning environment ensuring clean and green schools.

- Make at least one/two model/ideal school(s) in each cluster.
- Ensuring hundred per cent enrolment, retention and participation of the learners in schools.
- Special focus on developing minimum competencies of students in all subject areas. Specifically, emphasis will be laid on developing reading and writing skills of children at primary stage with essential mathematical competencies.
- Empowering teachers giving academic and pedagogical support through need-based orientation, training and feedback from time to time.
- Developing better relations with teachers so they can ask any queries for better learning achievements of their students and smooth functioning of their schools.
- Establish and strengthen better rapport between teachers–teachers, teachers–learners, teachers–parents, school–community, which will pave the way for better learning environment and smooth functioning of schools.
- Emphasising on inclusive classrooms ensuring physical and pedagogical facilities to children with special needs (CWSN) and children from backward and disadvantaged categories.
- Activate and sensitise the SMC members, making aware the parents, guardians, villagers for

making the school an ideal one.

- Regular monitoring and school visits for ensuring quality education to the learners, empowering and enriching teachers' competencies and proper utilisation of funds and grants of the schools.

In short, it is seen that 90 per cent CRCCs dreamed of creating healthy learning environment in schools, while around 96 per cent expressed their interest to develop minimum competencies of their learners (saying Minimum Levels of Learning). They have the vision to bring all children in the locality between the ages 6–14 years to schools. They are keen to ensure that the parents make their children able to read and write in their regional language or mother tongue, which is the major challenge according to the survey reports of several studies like ASER. Besides, 60 per cent of CRCCs are interested to develop database of schools, 80 per cent like to develop better human relations among learning communities and stakeholders, and all of them have special focus to achieve 100 per cent enrolment, retention and participation reducing dropout rate to zero.

OBJECTIVE 2: STRATEGIES TO MATERIALISE THE VISIONS/DREAMS

The CRCCs were asked how to materialise your dreams/visions to make your cluster a model one. They answered differently according to their own strategies. But, most

of the CRCCs focussed on self-empowerment. It means that before visiting schools for monitoring and supervision, they should have competencies and mastery over all subjects, pedagogical innovations and core teaching skills, policy and provisions of government for elementary education, etc. Otherwise they cannot guide and provide academic support to the teachers. They said, the induction training would help them very much, besides they have to do self-study of textbooks and other supplementary materials with policy and documents concerning elementary education. Despite, 90 per cent CRCCs focus on identifying major problems and preparing database of each school of their clusters. They feel proper planning is needed (both short and long-term) to improve the school environment. Around 90 per cent CRCCs said regular monitoring and school visits can improve the academic environment of the schools. It will help the teachers to clarify their doubts regarding any subject or content areas or pedagogical interventions. They said, delivering model classes in schools during their visit will help the teachers to know better strategies of teaching. Besides, they felt the need to develop strategies to arrange need-based training and orientation for capacity-building of the teachers, exploring local resources for better learning, forming resource group and learning community of resourceful dedicated teachers, visits

to homes of the students who are not regularly attending school, to review the academic achievements of the learners, etc.

OBJECTIVE 3: MAJOR CHALLENGES BEFORE CRCCs

The CRCCs were asked what would be the major challenges before them being the newly recruited CRCCs. The major challenges apprehended by majority of CRCCs were:

- Experienced and senior teachers may not accept them as CRCCs as they are comparatively juniors.
- Difficult to take any reformed/constructive steps to change in schools either due to opposition of teachers or pressure of union or non-cooperation of parents.
- Practicing/adopting students' friendly approach or methods in schools (like activity method, play way method, etc.) is a problem as most of the teachers practically prefer chalk and talk method or traditional way of teaching (standing before pupils, talking nonstop, giving least scope to learners, intervention or participation) yet in classrooms.
- Heavy workload (attending parent school, monitoring schools in the cluster and preparing SAMIKSHYA report with official assignments/formalities, etc.)
- Managing and ensuring quality education in single-teacher schools or schools having inadequate numbers of teachers as per requirements.

- Identification of fake enrolments.
- Time management.
- Irregular attendance of students due to several reasons like supporting parents in their professional activities, taking care of younger members of their families, etc.
- Promoting participation of CWSN through inclusive education is a great challenge as adequate numbers of Block Resource Teachers are not available.
- Linguistic problem, a challenge during classroom transaction in remote tribal villages/hamlets where teacher cannot understand the students' languages and *vice versa*.
- Activate and sensitise the members of School Managing Committee regarding their duties and accountability for smooth functioning of schools with focus on regular attendance of students in schools, proper utilisation of funds and grants, smooth operation of mid-day meal programme, etc.

OBJECTIVE 4: STRATEGIES TO MEET MAJOR CHALLENGES

Critical analysis of the views of CRCCs about the ways and means to tackle the forthcoming challenges reveals that all problems can be more or less solved through better relations and cooperation with teachers, parents, School Managing Committee members and administrative authorities.

They think major challenges like apprehension of non-acceptance of senior and experienced teachers to them as CRCCs, negative attitudes of some teachers before implementing some novel interventions and reforms, etc. can be solved by two ways like giving respect and taking help of the senior teachers like a junior member of the family, instead of an academic authority. Secondly, keeping better relations and communication with authorities and SMC/villagers through best performance can meet major challenges. Besides, they said self-confidence, patience to listen to others, tolerance, perfect planning, free from any sorts of prejudice, equal treatment to all; regular visits and interaction with students, teachers, parents, villagers and SMC members, etc., are the best ways to overcome any misunderstandings, misconceptions and strengthening better relations among stakeholders. Besides, they expect the support of their authorities always to make their clusters well-developed and well-functioned.

OBJECTIVE 5: PERCEPTIONS OF CRCCs ABOUT A MODEL/IDEAL SCHOOL

Almost all newly recruited CRCCs have the vision to make at least one/two school(s) in their cluster a model/ideal one. Keeping in view this promise, they had been asked a question, which school can be considered by you as a model or an ideal school for your cluster? They answered schools having following

features can be considered in a model or ideal schools.

- Essential infrastructural facilities for better learning like adequate number of classrooms, staff and HM chamber, separate office, well-equipped library with relevant study materials, learning corner, question bank, scientific apparatus, study circle, strong and safe boundary and protection wall, attractive school garden (s), better sanitation, separate toilets for staff, students' (boys, girls and CWSN), drinking water facilities, separate kitchen and dining hall for MDM, required number of trained teachers as per RTE norm, etc.
- Teachers should be trained, dedicated, sincere, friendly to students and parents, sociable, hard working, etc.
- School and classroom environment should be conducive for better learning.
- Teaching learning strategy should be as per pupils' needs, standard and interest.

- Activity-based learning approach with stress-free classroom environment should be ensured to the learners.
- Better cooperation, coordination and relationship among staff members.
- Perfect and update documentation and record maintenance as per official decorum.
- Regular attendance of the learners.
- CCE pattern evaluation focussing on holistic growth of the learners.
- Perfect functioning of PTA, MTA, SMC and others.
- All facilities to promote equity and quality inclusive education to all children, respecting diversity and differences particularly to the CWSN.

OBJECTIVE 6: AREAS TO BE GIVEN FIRST AND MOST PRIORITY

The CRCCs were asked, after taking charge the new assignment (after induction training), to which aspect(s) of schools will be given most priority. They identified following areas to be given the most priority.

TABLE 2

Areas to be given priority	<u>CRCCs preference (per cent)</u>
• School environment, sanitation and beautification	95%
• Developing minimum competencies of all learners	95%
• Focussing on teachers' regularity	90%
• Better cooperation among stakeholders	85%
• Regular attendance of the learners	85%
• Academic and holistic development of children	63%

The CRCCs mostly emphasised on better school environment, sanitation, drinking water facilities and beautification of schools, developing beautiful gardens and regular cleanliness. Similarly, 95 per cent of them focussed on low achieved learners developing minimum skills and competencies in curricular and co-curricular aspects. In addition, they have given priority to regular attendance of teachers in schools. This shows that teachers' irregularity is a big issue in tribal-dominated districts like Koraput of Odisha. Eighty-five per cent CRCCs feel better relationship with the stakeholders like teachers, students, parents, villagers/ community members, SMC members, authorities, etc. They have also promised to give special attention to students' absenteeism and decreasing dropout rate. They also highlighted some areas to be given priority are academic and holistic growth of the learners, proper utilisation of grants and funds, documentation and database, teaching using activity and learner-centric approach, proper operation of mid-day meal programme, etc.

OBJECTIVES 7 & 8: FACTORS ACCOUNTABLE FOR LOW LEARNING ACHIEVEMENTS OF THE LEARNERS AND SUGGESTIVE REMEDIES TO CHECK IT

Low learning achievements of the learners not only in the elementary schools in rural pockets of Odisha but also in all government schools in rural

areas of India is a great challenge before teachers and all stakeholders. The survey reports of ASER by Pratham organisation is a pointer in this regard. Keeping in view this sensitive issue, the newly recruited CRCCs who are also experienced teachers, were asked questions like: 'Low learning achievement of learners is a major problem in the schools of Koraput district. In your opinion which factors are accountable for this? What are your suggestions and remedies to solve/check the above problem of the learners?' They remarked following factors:

- Irregular attendance of students in schools.
- Indifferent attitude of parents towards the education of their children.
- Less commitment of teachers for their students' learning and absenteeism.
- Linguistic barriers—learners do not understand perfectly the teachers' language and *vice versa*.
- Poor financial background of parents.
- Adaptation of stereotyped and traditional methods during classroom transaction by teachers.
- Apathy of parents towards girl's education.
- Lack of learning environment in schools.
- Engagement of children in household activities like supporting parental profession and looking

after younger brothers and sisters in the family.

- Physical facilities and geographical location of schools (hill, cut-off and inaccessible areas).
- Inadequate teachers as per RTE norm.
- Single-teacher schools and multi-grade situation.
- No detention policy or compulsory promotion to learners from one class to another.
- First generation learners.
- No better rapport between school personnel and SMC managers.
- Anganwadies (ECCE) failed to motivate children for formal education.

REMEDIAL MEASURES TO IMPROVE THE LEARNING ACHIEVEMENTS OF THE LEARNERS

The CRCCs suggested the following remedies to address the problem of low learning achievements of the learners in elementary schools of the district:

- Active community involvement in school management and practices.
- Accountability will be fixed for the teachers, and disciplinary action may be taken if needed.
- The basic problems of the teachers will be solved immediately like residential facilities in nearby schools with living conditions.
- Suitable methods should be adopted for classroom transaction giving importance to the pupils' need, interest and mental ability.
- Empowering teachers pedagogically through need-based area-specific training to teachers.
- Teachers are only engaged for students' learning instead of official formalities and non-academic activities like teachers of privately managed schools.
- Low achievers may be specially identified and perfectly execute the SAHAJA — the reinforcement programme to uplift the slow learners.
- Frequent awareness programme may be organised to make the parents and community members aware of the need and importance of education in the present era.
- Regular monitoring of higher authorities.
- Instead of day-scholar schools, residential schools should be opened at *Gram Panchayat* level where both students and teachers are given shelter for staying there like Ashram schools at least in tribal-dominated districts like Koraput.
- Appointment of trained language teachers respecting students' language.
- Introduction of pass/fail system by abolishing no detention policy.
- Appointment of teachers as per the requirements of the schools and justifying Students Teacher Ratio.
- Prepare ECCE centres as motivational

centres for formal education of the children. So, necessary training and orientation may be given the workers.

- Strict instruction to parents to send their children to schools. Otherwise they may be debarred from governmental benefits and facilities.
- Supplementary textbooks and study materials may be developed keeping in view the area-specific or learner-specific needs.

CONCLUDING REMARKS

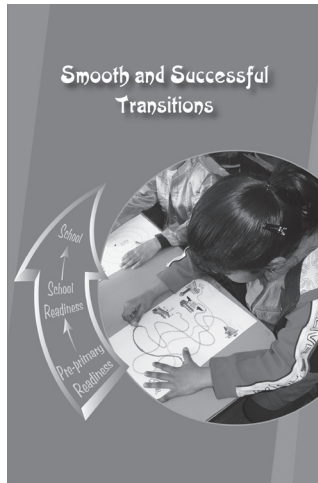
The CRCCs are the channel of communication between schools and local authorities. They are the best friends, guides and facilitators of teachers whose sole responsibility is to provide them academic and pedagogical supports. So, they should have competency and mastery over the contents and pedagogical innovations. They should be competent enough to take model classes during monitoring of the schools. For that, they should be made free from more official

formalities and documentation. They should be given ample opportunity to visit schools, deliver demo or model lessons, organise need-based local specific training and orientation of teachers, preparing supplementary textbooks, teaching learning materials and conducting action research relating to issues of students, schools and else. Besides, the district administration has to do two important things. Firstly, the performances of the CRCCs should be assessed (It is seen some CRCCs think this is a good job to prepare report staying at home without visiting schools or compel the teachers and headmasters to come and submit their reports and documents at their residence, even some CRCCs do not go to their parent-schools). Secondly, safety and security to the CRCCs must be ensured because sometimes it is really difficult or risky to take any innovative and constructive steps for better education of students and smoothing functioning of the schools.

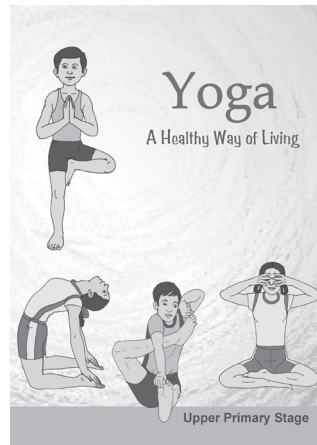
REFERENCES

- ANNUAL STATUS OF EDUCATION REPORT (ASER). 2014.
- CENSUS 2011. GOVERNMENT OF INDIA.
- GANDHI, M. 2014. Education of Tribal Children — A Need for Improved Pedagogy. *Journal of Indian Education*. Vol. 40. No 1.
- ODISHA ECONOMIC SURVEY. 2014–15. Published by Govt. of Odisha.
- OPEPA REPORT ON PRIMARY EDUCATION. 2012.
- PRADHAN, M. 2014. Perceptions of Young Teachers about the Issues Associated with Bringing about Model Schools in Tribal Areas. *Journal of Indian Education*. Vol. 40. No 3.
- . 2015. Low Learning Achievements of Children in Elementary Schools of Tribal and Rural Pockets of Odisha: What Do the Teachers Say? *Journal of Indian Education*. Vol. 41. No 3.

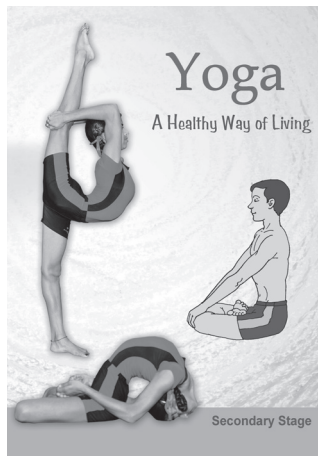
Some other NCERT Publications



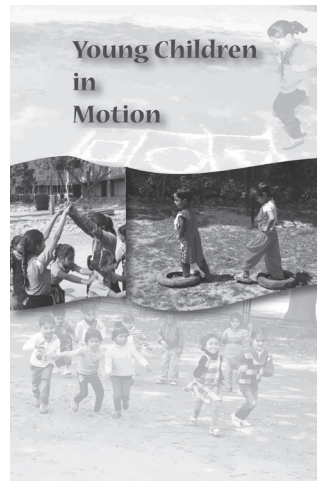
₹ 65.00/pp130



₹ 50.00/pp100



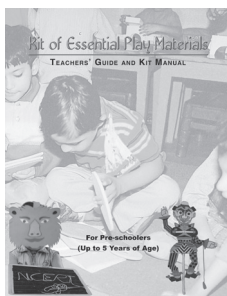
₹ 50.00/pp80



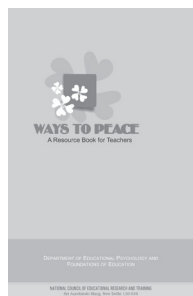
₹ 200.00/pp252

For further enquiries, please visit www.ncert.nic.in or contact the Business Managers at the addresses of the regional centres given on the copyright page.

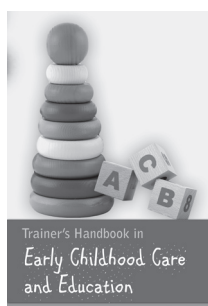
Some other NCERT Publications



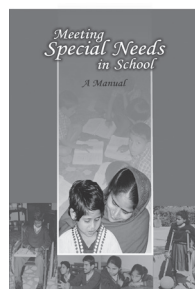
₹ 85.00/pp82



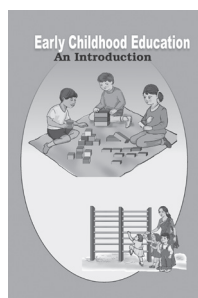
₹ 110.00/pp186



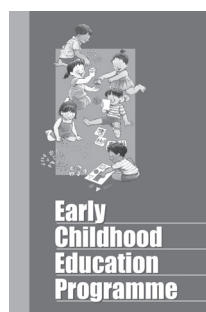
₹ 110.00/pp224



₹ 45.00/pp66



₹ 25.00/pp38



₹ 195.00/pp300

For further enquiries, please visit www.ncert.nic.in or contact the Business Managers at the addresses of the regional centres given on the copyright page.



NATIONAL UNIVERSITY OF EDUCATIONAL PLANNING AND ADMINISTRATION (NUEPA)

(Declared by the GOI under Section 3 of the UGC Act, 1956)

17-B Sri Aurobindo Marg, New Delhi-110016

www.nuepa.org

ADMISSION NOTICE 2017–18

(i) M.Phil. Programme (ii) Ph.D. Programme

The National University of Educational Planning and Administration (NUEPA), a Deemed University fully funded by Ministry of Human Resource Development, Govt. of India is engaged in capacity building and research in educational policy, planning and administration.

NUEPA offers M.Phil., Ph.D. and Part-time Ph.D. programmes in educational policy, planning and administration from a broader inter-disciplinary social science perspective. The research programmes of NUEPA cover all levels and types of education from both national and international development perspectives. NUEPA invites applications from eligible candidates for admission to its M.Phil., Ph.D. and Part-time Ph.D. programmes for the year 2017–18.

Fellowships

All candidates selected for the M.Phil. and Ph.D. (full-time) shall be offered **NUEPA** fellowship. The NET qualified candidates, who have been awarded Junior Research Fellowship by the UGC and who fulfil the required qualifications, are encouraged to apply. However, part-time Ph.D. candidates are not entitled for any fellowship.

Eligibility Criteria

Full-time Programmes

(a) A candidate seeking admission to the M.Phil. and Ph.D. programmes shall have a minimum of 55% marks (50% marks for SC/ST candidates and Persons with Disabilities) or its equivalent grade in Master's Degree in social sciences and allied disciplines from a recognized university. Candidates possessing Master's degree in other areas may also be considered if he/she has teaching experience or experience of working in the area of educational policy, planning and administration. (b) A candidate seeking admission to Ph.D. programme shall have an M.Phil. degree in an area closely related to educational planning and administration and/or exceptionally brilliant academic record coupled with publications of high quality. (c) M.Phil. graduates of NUEPA will be eligible for admission to the Ph.D. Programme after due scrutiny by a Selection/Admission Committee, if they obtain a FGPA of 6 or above on the ten point scale.

Part-time Programme

A candidate seeking admission to Part-time Ph.D. programme is required to meet the following criteria: (i) Should possess the educational qualifications as mentioned in Para (a) above; (ii) Currently, should be in full-time employment; (iii) Should be a senior level educational functionary with a minimum of five years work experience in teaching/research in educational policy, planning and administration.

It will be compulsory to attend one-year full-time course work by all part-time and full time candidates.

Mode of Selection

NUEPA will follow all mandatory provisions in the reservation policy of the Government of India. Admissions to M.Phil., Ph.D. and Part-time Ph.D. programmes will be made purely on the basis of merit following the prescribed criteria of the University.

The University reserves the right to decide the number of seats to be filled in the year 2017–18; the criteria for screening of applications; and the selection procedure of candidates for admission to its M.Phil. and Ph.D. programmes. The mode of selection of candidates will be as under:

Initial short-listing of applications will be carried out on the basis of relevance and quality of the brief write-up (in the prescribed format) in the proposed area of research to be submitted along with the application form. Short-listed candidates will be required to appear for a written test and those qualifying in written test will be subjected to personal interviews to assess their motivation and potential leading to final short-listing and preparation of panel of selected candidates, in order of merit.

Candidates must be possessing the eligibility qualification and submit marks statement at the time of written test on 01st July 2017.

How to Apply

Candidates may apply in the prescribed form for admission to M.Phil. and Ph.D. programmes of the University along with three copies of the brief write-up (in the prescribed format) on the proposed research topic of a contemporary issue within the broad framework of educational policy, planning and administration. For further details, please refer to the M.Phil. Ph.D. Prospectus, 2017–18 of the University.

The application form and the Prospectus can be obtained from NUEPA by remitting a sum of Rs.200/- (Rs.100/- for SC/ST candidates) by demand draft in favour of Registrar, NUEPA, payable at New Delhi if required by Post or purchased in person. The prospectus can also be downloaded from our website: www.nuepa.org by making online payment of Rs.200/- (Rs.100/- for SC/ST candidates) and attach the receipt/confirmation slip with the application at the time of submission to NUEPA.

Last Date of Applications

Application should reach the Registrar, NUEPA, 17-B, Sri Aurobindo Marg, New Delhi-110016 on or before **26th May 2017**. For further details, please visit our website www.nuepa.org

— Registrar

About the Journal

The Journal of Indian Education is a reviewed periodical published in May, August, November and February by the National Council of Educational Research and Training, New Delhi.

NCERT encourages original and critical thinking in education. JIE provides a forum for teachers, teacher educators, educational administrators and researchers through presentation of novel ideas, critical appraisals of contemporary educational problems and views and experiences on improved educational practices. Its aim include thought-provoking articles, challenging discussions, analysis challenges of educational issues, book reviews and other related features.

The Journal reviews educational publications other than textbooks. Publishers are invited to send two copies of their latest publications for review.

The views expressed by individual authors are their own. They do not necessarily reflect the views of NCERT or the views of the Editors.

© 2017. Copyright of the articles published in the Journal will vest with the NCERT and no matter may be reproduced in any form without the prior permission of the NCERT.

Advisory Board

Director, NCERT : Hrushikesh Senapaty
Joint Director, NCERT : B. K. Tripathi
Head, DTE : B. P. Bhardwaj
*Head, Publication Division** : Dinesh Kumar

Editorial Board

Academic Editor : Raj Rani
Chief Editor : Shveta Uppal
Ranjana Arora Kiran Walia
Anupam Ahuja M. V. Srinivasan
Madhulika S. Patel Kirti Kapur
Puthem Jugeshor Singh (JPF)

Publication Team

Chief Business Manager : Gautam Ganguly
Chief Production Officer (I/c) : Arun Chitkara
Editorial Assistant : Mathew John
Production Assistant : Mukesh Gaur

Cover : Amit Kumar Srivastava

OFFICES OF THE PUBLICATION DIVISION, NCERT

NCERT Campus
Sri Aurobindo Marg
New Delhi 110 016 **Phone : 011-26562708**

108, 100 Feet Road
Hosdakere Halli Extension
Banashankari III Stage
Bengaluru 560 085 **Phone : 080-26725740**

Navjivan Trust Building
P.O.Navjivan
Ahmedabad 380 014 **Phone : 079-27541446**

CWC Campus
Opp. Dhankal Bus Stop
Panihati
Kolkata 700 114 **Phone : 033-25530454**

CWC Complex
Maligaon
Guwahati 781 021 **Phone : 0361-2674869**

Single Copy: ₹ 45.00 *Annual Subscription: ₹ 180.00*

* Printed in May 2017

R.N. 26915/75

Revised Rates of NCERT Educational Journals (w.e.f. 1.1.2009)

Title	Single Copy	Annual Subscription
School Science A Quarterly Journal for Secondary Schools	₹ 55.00	₹ 220.00
Indian Educational Review A Half-Yearly Research Journal	₹ 50.00	₹ 100.00
Journal of Indian Education A Quarterly Journal of Education	₹ 45.00	₹ 180.00
भारतीय आधुनिक शिक्षा (त्रैमासिक) (Bharatiya Adhunik Shiksha) A Quarterly Journal in Hindi	₹ 50.00	₹ 200.00
Primary Teacher A Quarterly Journal for Primary Teachers	₹ 65.00	₹ 260.00
प्राथमिक शिक्षक (त्रैमासिक) (Prathmik Shikshak) A Quarterly Journal in Hindi for Primary Teachers	₹ 65.00	₹ 260.00

Subscriptions are invited from educationists, institutions, research scholars, teachers and students for the journals published by the NCERT.

For further enquiries, please write to :

Chief Business Manager, Publication Department
National Council of Educational Research and Training
Sri Aurobindo Marg, New Delhi 110016

E-mail: gg_cbm@rediffmail.com, Phone: 011-26562708, Fax: 011-26851070

Published by the Head, Publication Division, National Council of Educational Research and Training, Sri Aurobindo Marg, New Delhi 110016 and printed at Saraswati Offset Printer (P) Ltd., A-5, Naraina Industrial Area, Phase-II, New Delhi 110028