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Discursive Change and the Empowerment of Children — A Conceptual Analysis[#]

Anne Hill [*]

Abstract

The paper responds to key terms in the International Seminar on Democratic and Secular Education held in December 2008 concept note that signify notions driving education reform discourse in Kerala.

A post-structuralist approach is used to deconstruct the term 'secular' and how it constructs identity in a globalising discursive environment.

Tensions between notions of hegemony and agency in the language of globalisation, neo-liberalism and democracy are explored. Binary conceptions of reflective versus reflexive adaptation to change, critical versus emotivist argument and functional versus rights-based democracy are proposed.

Bernstein's taxonomy of learners' rights and conditions for their realisation is presented as a framework for constructing democratic learning environments.

Finally, attention is drawn to the affect of aligning education reform with a discourse of rights-based democracy on education practices for agency and empowerment.

[#] Paper delivered at the International Seminar on Democratic and Secular Education, Kerala, December 2008.

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Structure of this Paper

- First, I use a post-structuralist approach to deconstruct notions of 'secular' in the concept document.
- Second, I examine tensions between notions of hegemony and agency in the language of globalisation, neo-liberalism and democracy
- Third, I use Bernstein's taxonomy of learners' rights and conditions for their realisation as a framework for locating the democratisation of education in practice.
- Finally, I suggest how the discourse of rights-based democracy may impact on policy and curriculum design for the empowerment of children.

Introduction

The concept note preceding the International Seminar on Democratic and Secular Education held in December 2008 on Democratic and Secular Education held in December 2008 invited interrogation of key terms in the discourse of education reform in India and other developing countries, for example, South Africa. By opening this discursive space in the context of reform initiatives, the note implicitly acknowledges Cassirer's (in Korg 1979:7) assertion that:

> Cognition, language, myth and art; none of them is a mere mirror, simply reflecting the images of inward or outward data; they are not indifferent media, but rather the true sources of light, the prerequisite of vision, and the wellsprings of all formation…
>
> …they are the image-worlds whose principles and origin are to be sought in an autonomous creation of the spirit. Through them alone we see what we call 'reality', and in them alone we possess it: for the highest objective truth that is accessible to the spirit is ultimately the form of its own activity.

The concept note recognises that it is the formative power of discourse that creates 'reality'. Without examining how discourse constructs us and our relationships, we cannot understand or express what we mean by 'quality' or decide what we mean by the problematic term 'purpose' in that ubiquitous common-sense criterion: 'fit for purpose'. The image worlds we create in language and its artefacts shape our purposes, drive the forms of our interactions and legitimate their ideologies in the 'quality indicators' they use to ascribe success to the outcomes of our activities.

In its reference to 'spirit', Cassirer's assertion reminds us that language and affect are intimately connected in human discourse. As primary education practitioners, we know how powerfully learning is driven by 'spirit', or affect, in children. When considering how children are empowered or disempowered by different education discourses, we have to be aware of the constitutive effects the terminologies, that they encounter in their environments, have on their sense of being: the self.

The question is then, what forms of activities of the spirit cause us to interact with learning subjects, children, in one way rather than another? What does the way we treat children reveal about the learning identities we construct for them in our own minds? What effects, in the language of our daily interactions, throw up the signifiers, or terms, we love to use to legitimate our power in the discourse? What does the spiritual energy borne in our favourite terminology imply for policy and practice?

There are a number of related key terms in the list of objectives that summarise the aspirations expressed in the concept note: secular; democratic; globalisation, humane, inclusive, quality. In this paper, I attempt to explore how they are related and what this means for a coherent policy and practice in relation to children's empowerment.

Deconstructing 'Secular'

Bernstein (1996) reminds us that a first step in examining the chain of inter-connecting levels of the system that links policy ultimately to classroom practice (the 'pedagogic device') is to 'construct the learner'. This is a process of trying to understand pressures in daily social discourse and how they shape learners' identities. It is also important to interrogate what kind of pressures our own discourse might have in shaping learners' identities. The terms used in the concept note signify a number of discursive fields that could ultimately exert pressure on children's sense of self, which may, in turn, cause them either to feel secure or alienated in a school environment.

I have chosen a post-structuralist approach to a conceptual analysis of 'secular' for the following reasons:

Post-structural analysis focuses on how a signifier,as a term, operates differently in given contexts or fields of signification. The syntactic and lexical relationships in the concept note create a binary or adversarial relationship between the signifier 'secular', its sub-signifiers 'democratic', 'humane' and an undesirable element that is unnamed in conceptual terminology, but present in the energy of these signifiers' resistance to it. This element is hinted at in references to '[a] political formation with different ideological orientations' and 'Hindu communal forces'. For an outsider like me, these oppositional significations are not captured in universally accessible conceptual language and, therefore, are veiled because of my lack of intimate experience of the discourse of local politics. Philosophical rather than socio-political discourse, therefore, enables me to approach the signifier 'secular' in the context of the concept note. For me, the signifier 'communal', contrasted with 'secular', provides a useful portal to explanatory theory.

For my analysis of 'secular', therefore, I use Charles Taylor's (2007) juxtaposed notions of a pre-modern porous, communal, 'cosmic' self and a contemporary, interiorized, individualised 'buffered' self. This approach is valuable in helping us understand the discursive changes in children's milieus that are driving their need to adapt.

The porous self inhabits an outer 'enchanted' world that is fast disappearing under globalising discursive pressures. This self is constructed by and owes its existence to the collective, which, in turn, is maintained by a consensus about external spiritual forces of destruction or sources of well-being that either threaten or sustain it: that is, forces of 'enchantment'. The porous self is vulnerable to invasion by cosmic forces that are ascribed to powers beyond human control: spirits, demons (Taylor, 2007:38). In an enchanted world, external sanctions imposed by the forces of enchantment govern moral accountability. These sanctions exert pressure through ritual, art, myth, and language, which are communal, not individual, resources. In pre-modern communities, these communal resources take care of social cohesion and assure pro-social behaviour of individuals.

The 'buffered' self, that is the creature of modernity and globalisation, is disengaged from the outside world by putting distance and a buffer, or boundary (the 'mind'), between itself and the influence of cosmic forces. Under conditions of modernity and globalisation in

contemporary times, influences of enchanted worlds appear to be too localised, collective and cohesive to be discursively sustainable because globalisation breaks boundaries of time and place, disembeds and fragments knowledge and puts psychic, social, temporal and spatial distance between individual moral subjects and communal practices (Giddens, 1990:64).

A consequence of disembedding belief from communities is the reflexive interiorisation by globalised individuals of a fragmented, selected moral order and accountability to it. These individuals carry versions of the world with them, constructed in a continuous, reflexive discourse of adaptation replete with individuated moral codes and self-regulatory explanations for the outcomes of their choices. The individualised self lives in a modern, internal world constructed by its own reflexive adaptation to pressures that disenchant the outer world. Adaptation, a form of cognitive reflexivity, happens in order to free individuals from the imposition of external spiritual sanctions that might restrain their ability to act or move by personal choice.

The way individuals can free themselves is by applying critique, a cognitive activity, to demystify external pressures of the enchanted world. 'Evil spirits' become 'mental illness'. 'Enchantment' is explained away as an effect of the individual psyche (Taylor, 2007:540), not a communal experience. The globalised, post-modern individual can choose to inhabit or reject an enchanted world. Individuals can selectively appropriate elements of discourse, whether enchanted or pragmatic, for their explanatory power to interpret, construct and inhabit the individual image worlds they create for themselves.

It would be a mistake to suppose that Taylor's buffered self is an isolated entity: in an earlier treatise, his affirmation of the formative power of discursive interactions shows his affinity with social constructionist theorists:

> I am a self only in relation to certain interlocuters: in one way in relation to those conversation partners who were essential to my achieving self-definition; in another in relation to those who are now crucial to my continuing grasp of languages of self-understanding – and of course, these classes may overlap. A self only exists within what I call 'webs of interlocution' (Taylor in Mulhall and Swift, 1992: 111).

The individual self never reaches a point of stasis but is always evolving as it adapts reflexively to changes in its positioning in discourse. The question then arises: what is it in a learning identity that causes the subject to resist some pressures and adapt to others?

In this 'buffering' milieu, it would appear that the nurturing of personal agency is a prime objective of education, achieved by developing critical thinking skills in school and teacher education curricula. Recognition of the role of reason in agentic reflexive behaviour appears to be implicit in one of the learning outcomes of the home language curriculum in South Africa's National Curriculum Statement, namely, 'Thinking and reasoning.'

The application of critique, however, is not always a rational cognitive exercise. Taylor (2007: 474-477) describes a shift from instrumental to expressivist reflexivity in Atlantic societies since the 1960s. This expressivist reflexive process generates belief in individual human beings' inner resources as the origin of 'authentic' creativity. The ideal is 'to be oneself' in order to self-actualise. Taylor sees this process as having generated a prevailing hegemonic philosophical ideal of 'authenticity', according to which what feels right for the individual subject is a moral good (Taylor, 2007: 473-535).

MacIntyre (in Mulhall & Swift, 1992: 74) captures a similar theme in his term 'Emotivism', but makes an important distinction between the meaning and the use of moral utterances by the 'emotivist self'. 'Emotivist' moral arguments are manipulative in that an authoritative principled moral discourse inherited from the past is used to persuade others to alter their beliefs, not by means of a rational discussion based on impersonal criteria in the discourse, but by simply interpolating fragments of moral discourse into statements of one's own goals and values:

> By collapsing the distinction between personal and impersonal reasons, emotivism removes the possibility of treating persons as ends, as rational beings capable of making an independent assessment of what they take to be right; no moral debate can be anything other than an attempt to treat one's interlocutor as a means towards one's own goal, namely that of aligning her feelings to ones' own (Mulhall & Swift, 1992: 75).

Emotivist discourse, therefore, represents a struggle for ascendancy in the discourse between individuals. When the more powerful voice in a debate has brought its interlocutor into alignment with itself, 'common sense' is achieved between the parties in the debate. 'Common sense' does not necessarily mean that reason has prevailed in the debate, but that the power struggle has been resolved so that the interlocutor now subscribes to the assumptions carried in the terminology of the stronger voice. More widely applied, emotivist discourse represents contests between aspirant hegemonies in the body politic. In summary, emotivist discourse is not restricted to the level of the individual, but operates to cause social groupings to cohere and to justify the political goals of hegemonic forces or their challengers. Dahlström and Lemma (2008: 39) describe how an emotivist discourse, in this case neo-liberalism, operates at the level of hegemony:

> The transformative character of neo-liberalism is played out through its invisibility. This invisibility creates an imaginary consensus that gives the impression that we are all talking the same language and that we in principle also want the same things to be accomplished. For example, who can question learner-centred education if by that we discursively mean that the learner is at the centre of education? This consensus gets under our skin as common sense and becomes taken for granted. When the consensus has entered the docile stage the road is open to reduce educational practices into technical formulae easy to measure and manage to create the desired efficiency and control.

There are tensions between the language of hegemonic reflexive adaptation to contemporary global neo-liberal imperatives, particularly in management styles, and traces of the rhetoric of emancipatory pedagogy, hegemonic in liberation milieu in the 1980s and early 1990s, that have found their way into curriculum policy in South Africa. These tensions cause incoherence in current education discourse. Unfortunately, proponents of both these particular paradigms tend to engage in emotivist manipulation in justifying their practices.

It is not difficult to imagine how emotivist discourse causes stress for the globalised buffered self, who is reacting reflexively to competing hegemonic pressures. Personal agency in navigating dilemmas has become the prime modality of post-modern global living, but the compass is not clear. Individuals may find themselves either exhorted to apply 'critical thinking' or to be their 'authentic' selves in pursuit of fulfilment.

The truly critical thinker can expect to be lonely if the culture is emotivist because rational thought would tend to be counter-hegemonic in such an environment. Ironically,

neo-liberal managerial language requires 'authentic' selves to define their 'own goals', set 'personal' targets, carry out 'self-evaluation' and engage in individuated 'reflexive' processes to improve 'performance' for personal 'reward', usually remunerative. While the language of personal self-regulation seems to admit the subject's agency into managerial procedures, all these 'authentic' processes, however, are only legitimate if they promote hegemonic action in measurable ways.

There is also tension between the ideals of reason and of authenticity. Reason demands the application of critical argument based on 'universal' rational criteria to questions about value, while authenticity seeks solidarity with like-minded subjects. Although the liberationist rhetoric of democracy may appear to create conditions in which both modalities can co-exist, it will not resolve this particular tension, except perhaps to provide the means to de-legitimise violence between the contestants. After all, legitimising contests between aspirant hegemonies is a defining feature of democracy. For Walzer (in Mulhall and Swift 1992:134-139), democracy is not about 'truth' or reason but about participation in law-making, even if the law is made 'wrongly'. This view suggests that democracy can only provide an environment for discursive interaction; it will not necessarily guarantee emancipation or freedom to exercise personal agency. A remedy for agency appears to be available rather in discourses of constitutionality and rights that protect subjects from hegemonies.

The tension between the claims of individual agency and hegemony is explored in the paragraphs that follow.

Tensions in the Language of Globalisation: Hegemony and Agency

The operation of emotivist argument can be seen to appear in rationales for policy. The manipulative, rather than rational, use of moral signifiers means that the will to power in hegemonic language that exerts the most pressure can invade and distort discourses of morality. Thus, the language of the market is conflated with the language of morality in the vision of the ultimate outcome of South Africa's National Curriculum Statement:

> A prosperous, truly united, democratic and internationally competitive country with literate, creative and critical citizens leading productive, self-fulfilled lives in a country free of violence, discrimination and prejudice (*Government Gazette,* 31 May 2002. No. 23406: 13).

Market values of prosperity, global competition, productivity and the individual's accountability to oneself are presented as the hallmarks of success in instantiating morally acceptable conditions based on principles of respect for personhood (freedom from violence), equality (freedom from discrimination) and dignity (freedom from prejudice). The language of morality has been appropriated to validate market goals (Hill, 2003:96), but no rational argument is offered to explain how prosperity, global competition, democracy, productivity and self-fulfilment eliminate violence, discrimination and prejudice.

The chief vector of market-driven morality is a globalising neo-liberal discourse of free trade that promotes efficiency in the distribution of educational resources as a prime value. Strategic measures that result from this discourse include low public expenditure, cost-control rather than demand-led budgeting, privatisation, competition between education 'markets', decentralisation, fiscal deregulation, increasingly differentiated provision of

services [local and global], selective education, corporate-style managerialism, and a deregulated labour force, for example, short-term contracts and casualisation of teaching input. Globally, neo-liberal policies favour untrammelled access to states to set up profitable educational institutions. To achieve his, international capital aims through mechanisms such as the World Trade Organisation's General Agreement on Trade in Services (GATS) to create a 'level playing field' between participating states, but, in practice, penalties and restrictions of access are not evenly applied to developed and developing economies (Hill, 2007:205-206).

The freedom that 'free trade' signifies is more apparent than real, however, because it is restrained by a discourse of standardisation and bureaucratisation of education (Hill, 2003: 97-98) that serves to produce a reliably measurable and mobile skilled global labour force. The specific needs of local contexts are unlikely to be prioritised unless they comply with the global educational objectives measured in transnational benchmarking exercises. For example, amendments to the South African Schools Act (Government Gazette 2007) make it possible to exclude learners, who are older than the age norms for their grades, from the school system while making allowance for admitting underage learners. Age-norming in regular public schools has been tightened inspite of lack of progress in setting up age-blind basic education institutions for learners, who have fallen out of sync with norming practices, under-provision of vocational FET colleges, especially in rural areas, the increasing number of AIDS orphans and households headed by children, whose normal progress through the system is disrupted, and the persistence of socio-economic conditions in which migrancy interrupts and delays progress through school.

When we consider the developmental challenges of diversity of every conceivable variation in South Africa, we can see that there are discrepancies between what we believe is desirable, namely, redress (Government Gazette 30637, 2007) and what we might actually achieve in education, namely, marginalisation of the most impoverished classes through standardisation of, for example, age and grade norms. While standardisation and uniformity tend to eliminate anomalies from the system in top-down processes, developmental approaches tend to be contextual, organic and target particular problems on the ground with unique remedies. This tension begs the question as to whether bottom-up developmental imperatives are being overwhelmed by a standardising global hegemony or does the possibility of exercising localised agency to address diverse cases exist in this scenario?

Resistance in the Discourse, Rights and the Empowerment of Children

While Althusser proposed that a dominant hegemonic ideological discourse overwhelms all alternative discourses to produce compliance, Fairclough draws on Gramsci to propose a definition of hegemony as the outcome of a process of negotiations of meaning that produces an evolving ideological consensus. According to Fairclough's view,

> The existence of such competing elements [in the discourse] bears the seeds of resistance since elements that challenge the dominant meanings equip people with resources for resistance (in Phillips and Jørgensen, 2002: 76).

Fairclough's analysis opens the discourse to the possibility of using discursive resources agentically to resist dominant voices: 'individual creative acts cumulatively establish

restructured orders of discourse' (Fairclough in Phillips and Jørgensen, 2002: 17). Fairclough's theory implies that local educators need to engage reflectively, not reflexively, in global discourse. Using well-justified criteria to critique external influences and pressures, curriculum planners need to evaluate these influences against criteria that respect local contexts in order to make conscious decisions about how to engage with the likely impact of global influences on children's identities. They need to work empathetically with children hovering between porous and buffered states of being, between enchanted and secular cultures. They need to make sure that in moving from the porous self towards the buffered self, they are not vulnerable to the manipulations of emotivist argument that can enlist their allegiance to discourses that are anti-social or even violent. Children's agency, ethics and critical thinking should be fundamental objectives in practices that shape learning identities.

To empower children by developing their qualities of agency, ethical behaviour and critical thinking, attention must be paid in policy to both the conditions in which education is conducted as well as to what forms of knowledge are privileged in the curriculum. How children's progress is mediated and assessed is crucially important in empowering them to be confident and agentic as learners and citizens.

Learning Conditions

The difference between the kind of functional democracy that practices the simple majoritarianism implied in Walzer's definition (Mulhall and Swift, 1992:134-139) and procedural democracy, governed by rights-based constitutionality, should be recognised in state education that claims to be preparing children for citizenship. If the constitutional, rights-based variation is preferred, then conditions in schools must model the conditions that such a system hopes to instantiate in civic life.

In 'announcing' his taxonomy of students' rights and conditions for their realisation, Bernstein (1996:6-7) proposes that students' rights operate at three levels: individual, social and political.

At the level of the individual, the student has a right to enhancement that is realised through a discourse of assessment practised as initiating the student across boundaries, not as gatekeeping. As children experience assessment as a process that condenses past experience with a view to future achievement, confidence in themselves and in the education institution grows. Confidence becomes the condition in which the right to enhancement can be realised. Modes of assessing progress and the value ascribed to forms of activities in schooling actually shape the learning identity in profound ways. What assessment privileges, becomes what children aspire to be.

At a social level, students have a right not just to be included, but also to be autonomous. Inclusion is not the same as absorption. The condition generated by feeling included without surrendering agency and cultural identity lead to a spirit of caring, what Bernstein terms 'communitas'. No arbitrary proscriptions on membership of the learning community should undermine the child's sense of security as a learner.

On a political level, students have a right to participate in arrangements to do with governance. This means that there need to be arrangements that enable children's voices to have an influence on the way the institution is governed. The condition generated by the exercise of this right is lively civic discourse. Civic discourse is both the result of hearing the voice of learners, but also sustains responsible democratic behaviour.

The purpose of Bernstein's model is to provide a framework against which the distribution of rights in schools can be measured to see how equal or unequal it is at all three levels of participation. Bernstein claims that he has described conditions for effective democracy in schooling and leaves it to the reader to deduce what he means by 'effective democracy' from the elements of the model.

Curriculum and Agency

A paradigm that has re-emerged in recent decades to challenge and resist the neo-liberal hegemony can be discerned in a burgeoning discourse of critical literacy. Critical literacy, like its antecedent critical pedagogy, legitimises its forms of activity in terms of a human rights discourse. Fundamental to its ethos is a commitment to the exercise of personal agency governed by critical attention to universal egalitarian ideals dominated by the principle of emancipation from hegemonic social control. Dozier, Johnston and Rogers (2006: 12) explain the ideal of agency behind a critical literacy approach to teaching and the social impact to which it aspires:

> We want our teachers to understand that through their teaching practice they can have an impact on others: students, teachers, schools, and society more generally. This is often referred to as agency: the idea that by acting thoughtfully, one may actually effect change (Johnston, 2004)… Agency can be viewed as essentially a personal narrative in which the self is a protagonist who confronts and solves problems, with associated motives and affect.

While the orientation of critical literacy approaches to human rights is generally recognized, the complexity of the human rights discourse itself gives rise to ideological battles over the distribution of resources and styles of governance, all of which argue their cases in terms of rights (Zafar in Hoppers, Gustavsson, Motala & Pampallis, 2007). Neo-liberals however, might express very different conceptions of rights from those of social democrats. If policy- makers want a rights-based curriculum, curriculum designers have to reach consensus about core values and their application to classroom practice and assessment. For example, if agency is an important right in the system, then disciplines such as the arts and creative writing should not be marginalised. Philosophy and critical inquiry, led by children's own questions, becomes as important as mathematics.

Conclusion: Democracy, Globalisation and Quality

Democracy will not necessarily determine what stakeholders in education value in its various processes, outcomes and actors and, therefore, what kind of person emerges from the education process. Particular values carried and endorsed by democratic processes can differ, and the version that informs an education system should represent consensus flowing from a principled, critical, inclusive discursive negotiation.

Globalisation is a powerful vector of hegemonic ideology but does not, in itself, determine the nature of the ideology. Globalisation does have an impact on the post-modern subject, however, in fragmenting and dispersing the situated coherence of local worlds, causing the subject to have to live reflexively to integrate disparate contacts, interactions

across the limitations of time and space, disembedded images and messages and cultural exchanges into theories to live by.

The fragmentation characteristic of the multi-modal globalised environment suggests that the achievement of personal agency, in engaging in the quest for coherent meaning-making, should be a key quality indicator in the system. Coherence would come from the integrative power of subjects' personal interiorised critical principles. It seems sensible to make sure that an education system promotes the critical principles that work in favour of the common good. This implies that one of the most important tasks of curriculum reform would be to seek clarity on the relationships between rights and ethics.

Critical reflection on governance procedures, in the light of the need to value agentic learning and ethical participation in discourse as the prime outcomes of education institutions, could enable policy- makers to determine whether means derived from reflexive adaptation to hegemonic practices - for example, efficient management systems; fiscal discipline; standardisation - have become ends when assessing success in education. Just as the whole meaning of the pedagogical device is condensed in assessment practices (Bernstein, 1996), the whole meaning of an institution's education discourse is condensed and expressed in ascriptions of quality that play out in the curriculum, deployment and distribution of resources and ways teachers teach and schools are governed.

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Age Composition and Literacy Progress in India

— An Inter-State Analysis

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Abstract

This paper highlights the role of age-structure in assessment of progress in literacy between populations. The paper argues that a comparison of levels of literacy across regions with varying composition of age-structure might not be meaningful given the negative relationship between age and likelihood to be literate. This has led to a computation of a 'literacy deprivation index adjusted with age structure'. Such an adjustment results in wider gap of literacy across all the states given that the adjusted literacy assumes lower values when adjusted with the age-structure. This minimal standardization along with the age-structure of the population offers a valid comparison of this commonly used indicator and its prospect of progress too is largely conditioned by the emerging age-structure of the population as a resultant of unfolding demographic transition.

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Introduction

Education has been considered as one of the most important instruments to broaden human development and foster economic growth (Lucas, 1988 and Barro, 2001). It enhances the capabilities of individuals, families and communities in terms of access to health, economic, political and cultural opportunities. Therefore, Universal Declaration of Human Rights 1948 recognized education as a basic human right and committed to education for all. Literacy rate, defined as the proportion of population with the ability to read and write any language with understanding, is the most simple and widely used indicator to assess and compare the progress in educational development across regions.

However, the average literacy rate may not be an appropriate indicator to compare educational development across regions as it disguises the vast disparity across different sub-groups of the population. For instance, two regions with the same level of literacy rate could very well differ in the distribution of literates across different socio-economic sub-groups of the population. In one region, it may be more concentrated among highly endowed class whereas in another region, it may be equally distributed. Thus, any comparison made on the basis of average literacy rate could be misleading.

The need for inequality insensitive indicator to measure economic and social outcomes is well documented in the measurement literature (Atkinson 1970 and Hicks 1997). There have been considerable attempt to measure economic and social outcomes accounting for group-inequality (Anand and Sen, 1995; Jayaraj and Subramanian, 1999; Subramanian and Majumdar, 2002). Such consideration has been adapted by Human Development Report of United Nations Development Programme (UNDP) towards making its indicator inequality sensitive. Group-inequality adjustment in economic and social outcomes is warranted in the light of two fundamental requirements of any outcome indicator, first, to compare the outcomes across different regions and second, to compare its distribution across different socio-economic sub-groups of the population within and across the regions.

The group-inequality adjustment is made for many social and economic outcomes on account of characteristics like gender, sector, caste, occupation, etc.. Apart from differences on these counts, the component of literacy or any other indicator of educational development has one specific dimension of group disparity that relates to age. This is primarily because education and learning is an achieved characteristic during the younger ages which sustains through one's lifetime. Hence, there is a systematic pattern of advantage in literacy or education for the young against the old in any population. This difference needs to be reckoned within aggregation of literacy in case comparisons are made across populations that are younger vis-à-vis those that are older. The older population will always have a disadvantage as regards literacy or education considering that all possible interventions are effective during the early ages, unless specific emphasis is laid towards making the elderly literate.

With this background, the present paper makes an attempt at illustrating the role of changing age structure on levels of literacy across Indian states. For this purpose, it proposes an age-adjusted literacy index. Age-adjusted literacy index comprehends the literacy rate across states under the assumption of a given age composition. Prior to the formulation and illustration of this index, there is a brief discussion on the policies and programmes on literacy adopted in India since Independence. An analysis of the age-specific literacy and its significance in policy formulation has been elaborated in the third section of the paper. In

the fourth section of the paper, age-adjusted literacy deprivation is computed for robust comparison of literacy across the states. Lastly, the concluding section discusses the findings and offers some insights for policy formulation.

Policy on Literacy in India

The role of education in country's socio-economic development was well recognised by founders of Indian Constitution on the eve of Independence. However, making people literate or providing basic education to enable everybody with basic skills of reading and writing was a daunting task before the country due to large pool of illiterate. As per first population census of Independent India in 1951, only 18.3 percent people were literate. Therefore, the focus needed was on providing elementary education to children between 6-14 years age and adult education for the person 15 and above in order to achieve full literacy.

In the period immediately after Independence, adult education took a backseat as the policy focus was on elementary education. In the Constitution of India, adopted in 1950, elementary education received explicit attention. The Constitution of India made a provision for free and compulsory education for all children upto 14 years under Article 45. It states that "the state shall endeavour to provide, within a period of ten years from the commencement of the constitution, for free and compulsory education for all children until they complete the age of fourteen years". The Constitution also made the provision for promotion of educational and economic interests of S.C., S.T. and other weaker sections. Article 46 states that "the state shall promote with special care the educational and economic interests of the weaker sections of the people, and, in particular, of the Scheduled Castes and the Scheduled Tribes, and shall protect them from social injustice and all forms of exploitation. While it was not explicitly stated in so many words, the implicit assumption at the level of policy seemed to be that expansion of elementary education would take care of the problem of mass illiteracy.

In-spite of rapid expansion of the formal school system at the level of elementary education, India was unable to universalise the free and compulsory elementary education within the stipulated period set by the Constitution. Though it was stated to be done within a period of 10 years from the commencement of the Constitution, even today it is not realised despite many major policy initiatives from time to time.

The National Policy on Education, which was announced in 1986, envisaged universalisation of primary education by 1990. The revised National Policy on Education, 1992 is in line with the earlier policy. Sarva Shiksha Abhiyan (SSA) and Mid-Day Meal Scheme (MDMS) are the two very effective policy initiatives in that direction. The Parliament has passed the Constitution's 86th Amendment Act, 2002 to make elementary education a fundamental right (Article 21A in Part III) and fundamental duties (under Article 15 A) of parent and guardian for providing opportunities of education to their children between six and 14 years.

The Tenth Five Year Plan (2002-2007) laid emphasis on Universalization of Elementary Education (UEE) guided by five parameters: (i) Universal Access, (ii) Universal Enrolment, (iii) Universal Retention, (iv) Universal Achievement, and (v) Equity. One of the major schemes of elementary education sector during the Tenth Plan was SSA, which has set up the following objectives; (i) all children to be in school by 2003, (ii) All 6-14 age children would

complete five year primary education by 2007, (iii) All 6-14 age children would complete 8 years of schooling by 2010, (iv) All gender and social category gaps would be bridged at primary stage by 2007 and at elementary education level of 2010, and (v) there would be universal retention by 2010.

Right to Education Act came into effect from April 2010; and enshrines a fundamental right of all children to demand eight years of quality elementary education. As a result of a number of policy and Constitutional provisions, 'Universal Elementary Education' became a reality following which government is going in for Universalisation of Secondary Education. The draft paper of 12th Five Year Plan states that "with UEE becoming a reality, near universalisation of secondary education is a logical next step".

Thus, UEE has materialised after 60 years from the commencement of the Constitution while it was envisaged to be accomplished in a decade. Many factors could be responsible for this failure. The analysis of the factors responsible for this is beyond the scope of the present paper. One of its consequences, along with the overlooking of adult literacy mission in the early stage of planning, has led to the failure of achieving full literacy.

Although the emphasis on adult education was overlooked during the initial Plan periods, its imperatives were recognised by the leaders of freedom movement in India. In the pre-Plan period (1947-1951), the literacy programme was considered part of a comprehensive programme of social education. The Central Advisory Board of Education (CABE) appointed the Adult (social) Education Committee, in January 1948, under the chairmanship of Mohanlal Saxena. It recommended that provincial governments should accept the aims and objectives of social education and set-up social education councils to assist Directors of Public Instruction (DPI). Maulana Abul Kalam Azad, the then education minister, called the new programme of adult literacy as 'social education.'

The need of adult education were again emphasised in mid-1960s by the Education Commission chaired by D.S. Kothari. The commission has aptly observed "India had more illiterate in 1961 than in 1951, with an addition of about 36 million illiterates". The same remarks also hold good for 1971, 1981, and 1991 literacy figures. Thus, it may be concluded that in absolute terms, India has been more illiterate than what she was before Independence. A faster growth of population has pushed the country further behind in its endeavor to reach universal literacy. As a result, an effective programme of adult education is necessary in the Indian context which should involve: i) liquidation of illiteracy; 2) continuing education; 3) correspondence course; 4) libraries; 5) role of university in adult education; and 6) organisation and administration of adult education. According to this commission, there should be 80% literacy by the year 1976.

The year 1978 was an important milestone in the history of adult education, since, for the first time, a concerted national policy to educate millions of adult illiterates in the age-group of 15-35 years was formulated. The National Policy Statement on Adult Education emphatically stated the resolution of the government of India "to wage a clearly conceived well planned and relentless struggle against illiteracy to enable masses to play an active role in social, cultural and economic transformation of the country." To bring about this social, cultural and economic transformation, the government launched the National Adult Education Programme (NAEP) on October 2, 1978. The objective of NAEP was to educate adults in the age-group of 15-35 years so as to promote: 1) literacy, 2) functionality and 3) social awareness.

Literacy is a term which, generally, includes the three Rs namely, reading, writing, and simple arithmetic. Functionality, under the NAEP, involves the acquisition of knowledge, information, and skills that are useful for carrying on a day-to-day life in a meaningful and purposive way. Social awareness tries to improve the knowledge and understanding of broad issues of social justice, including the understanding of major social, political and economic legislations.

On May 5, 1988, the Government of India launched a National Literacy Mission (NLM) with an initial target to make 80 million persons, in the 15-35 , literate by 1995. The target was later enhanced to 100 million by 1997 and the revised target is to achieve a threshold level of 75 % literacy by 2007 while 85 % literacy target was set for the 11th five year Plan (2007-2012). Like past experience this target was also left far behind and the literacy rate in 2001 was only 74 percent. On account of its failure to achieve its literacy targets, India still has a very large pool of illiterate population. According to the recent population Census, conducted in 2011, nearly 27.3 crore persons, comprising 9.6 crore males and 17.6 females, are illiterates.

Age-specific Literacy Rate in India

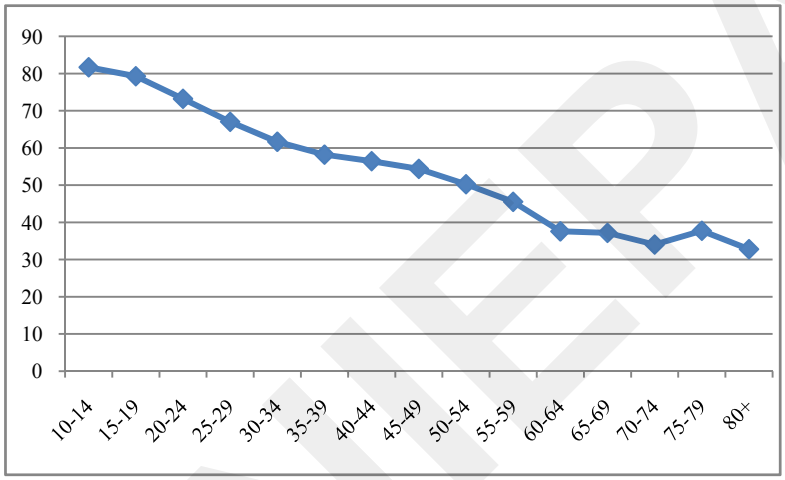
Inspite of recognising the importance of literacy in a country's socio-economic and cultural development, India's progress in this field has been far from satisfactory. Though there is much to praise about India's progress in achieving gains in literacy rate during the last two censuses in 2001 and 2011, it is not only far from claiming universal literacy but also falls short of its own target of 80 percent, to be attained by the year 2011, as set by the Planning Commission of India. National literacy rate in India has risen from 64.8 percent in 2001 to 74 percent in 2011. This achievement, too, is far from uniform across the regions/states of India. As per population census of 2011, Kerala remains at the top, with a literacy rate of 93.91, and Bihar, at the bottom, with a literacy rate of 63.82 per cent. This disparity is further depicted in terms of 11 states, out of 35 states and union territories, recording literacy rate above the national average.

Literacy, like any other characteristic observed among individuals, can vary by gender and other categorizations such as urban/rural place of residence, region etc. One of the specific and important features of literacy is its interaction with age cohorts. It has been noticed that for a typical age profile, at any point in time, there are a higher proportion of literate persons in the younger age cohort than the older one. This is due to greater access to education benefitting the most recent cohorts compared to those who are older. This is called a cohort effect (or a generation effect) in social sciences. A cohort (generation) is defined here as a group of men and women born in the same year and who, therefore, get older with the passage of time. In almost every country of the world, older cohorts are less educated than younger cohorts because education is attained during younger ages and most education systems have expanded over time.

Literacy rate across different age cohorts for India is presented in Figure 1 and by States in Table 1. It reflects a negative relationship between age cohorts and literacy rate. The literacy rate is highest for age-group of 10-14 and lowest for the age-group 80^{+}. Given this age pattern, average literacy rate, measured as the proportion of population of seven years and above having the ability to read and write any language with understanding, may not be an appropriate indicator to compare the literacy progress across states. The policy to

improve literacy rate through expanding school enrolment among children has its own limitations. Even if states manage to achieve universal elementary education for the children of age-group 6-14, it will take decades for such policies to achieve full literacy because of the time it takes for the educated younger persons to gradually replace those less educated and older. This age-structural momentum is only reduced in the rare cases of strong campaigns aiming at adult literacy.

FIGURE 1
Age-specific Literacy Rate in India



Thus among the other factors, cohort pattern also influences the overall progress in literacy rate. The overall literacy continues to improve with the passage of time because of cohort replacement. However, literacy improvement as a result of cohort's replacement varies widely across regions due to differences in age compositions. In case of India, the age compositions of the states differ, thus literacy progress differs. For example, a state, with high proportion of young population or low share of older age population, will show higher improvement in literacy when compared with a state having low proportion of young age population or high proportion of older age population.

The analyses of age cohort specific literacy rate across states reveals wide variation at any specific age cohorts. For instance, the literacy rate in the age-group 10-14 is highest for Kerala (98.79 percent) and lowest for Bihar (60.02). There are four other states, namely Himachal Pradesh (96.89 percent), Maharashtra (94.71 percent), Tamil Nadu (94.46) and Uttarakhand (90.85) having literacy rate more than 90 percent in the 10-14 age-group. The same at the national level is 81 percent. From the present scenario of age cohort specific literacy rate, India's journey to attain full literacy seems pretty difficult. This is because the delay in implementation of UEE and ignorance of adult literacy programme, which have generated a large pool of illiterate people, is expected to take a longer time to be replaced by young educated. The state- wise analyses makes the situation more disappointing as some states (like Bihar, Jharkhand, J&K, Assam, Uttar Pradesh) have quite a low level of literacy among the very young age-group (10-14 and 15-19).

TABLE 1

Age-Specific Literacy Rate in India

States	*10-14*	*15-19*	*20-24*	*25-29*	*30-34*	*35-39*	*40-44*	*45-49*	*50-54*	*55-59*	*60-64*	*65-69*	*70-74*	*75-79*	*80+*	*All*
Andhra Pradesh	85.03	77.25	69.66	60.79	54.27	48.96	46.38	44.36	39.24	36.99	29.91	30.28	26.23	31.08	26.13	58.62
Assam	75.02	75.27	71.57	64.88	60.07	56.99	55.84	55.97	52.70	50.66	41.48	42.86	37.65	41.47	34.21	63.48
Bihar	60.02	60.34	52.67	47.61	42.85	40.17	38.93	38.19	37.67	33.67	29.63	29.78	28.36	30.17	29.09	47.14
Chhattisgarh	86.78	82.03	74.65	67.96	60.75	56.67	53.92	50.48	44.52	38.18	30.27	28.41	25.65	26.69	25.11	63.68
Gujarat	86.43	83.26	77.38	71.00	65.67	62.70	60.24	57.78	54.24	48.36	41.68	41.42	37.09	40.00	30.95	68.33
Haryana	89.51	86.48	78.49	69.77	61.39	57.16	55.90	53.33	48.83	43.69	32.56	26.84	24.76	26.76	22.09	67.08
Himachal Pradesh	96.89	94.39	90.01	85.02	79.14	73.20	69.88	63.57	54.11	45.72	35.99	30.71	26.88	28.43	21.09	75.46
Jammu & Kashmir	73.23	70.81	64.80	58.79	53.87	47.66	44.13	39.86	35.98	30.38	24.08	22.74	21.48	24.92	18.99	55.19
Jharkhand	69.53	68.87	60.89	54.17	47.54	44.81	43.01	42.82	40.26	36.91	29.21	29.54	28.37	32.25	30.91	53.28
Karnataka	87.47	82.57	77.05	68.30	61.93	56.38	54.61	53.14	48.36	45.91	37.82	38.27	33.27	36.87	30.08	65.45
Kerala	98.79	98.62	98.01	96.94	95.65	92.93	91.31	87.80	85.22	78.93	73.01	68.07	68.41	66.80	59.08	90.90
Madhya Pradesh	83.04	78.39	70.52	64.72	59.41	57.11	55.31	52.47	47.55	40.77	32.44	31.11	28.55	30.61	26.85	63.03
Maharashtra	94.71	91.83	87.01	81.74	75.97	71.32	70.15	67.83	63.53	55.83	43.53	41.22	37.86	40.95	35.06	76.14
Orissa	79.77	77.29	73.26	65.32	59.66	55.99	55.94	54.37	49.70	45.51	38.46	37.32	35.92	39.85	37.89	62.67
Punjab	89.40	86.00	80.12	73.70	68.40	65.05	62.14	59.18	54.25	48.62	36.13	30.99	27.58	30.16	24.74	68.89
Rajasthan	80.89	75.52	67.94	62.01	56.28	51.89	48.10	44.31	39.69	33.42	26.92	25.59	22.79	24.65	19.98	59.17
Tamil Nadu	94.46	90.93	85.80	78.11	73.70	67.17	65.97	61.12	55.91	50.46	44.54	44.02	40.35	44.33	39.67	72.72
Uttar Pradesh	74.93	70.84	61.37	55.16	50.09	48.45	46.71	44.08	40.55	35.19	29.43	28.56	26.85	28.79	27.50	55.51
Uttarakhand	90.85	87.34	80.38	73.14	67.67	63.37	61.21	58.14	53.70	48.86	41.31	39.60	36.15	37.92	32.65	70.77
West Bengal	82.90	79.25	74.24	69.32	65.58	62.59	62.66	61.88	58.92	57.01	49.01	49.26	47.13	50.79	47.91	68.39
India	**81.71**	**79.29**	**73.23**	**67.05**	**61.68**	**58.20**	**56.47**	**54.38**	**50.26**	**45.54**	**37.59**	**37.17**	**34.05**	**37.73**	**32.79**	**64.30**

Source: Computation is based on data of Census 2001

Hence, a realistic assessment of literacy rate across age cohorts captures the full non-linear dynamics of changing literacy among the population. It also provides the insight regarding the share of school enrolment and adult education towards improvement in literacy. This clearly indicates that attainment of universal literacy in India (the set target of the 12th five year plan) requires a sincere focus on adult literacy programme. Specific attention is needed to be put in the state having high illiteracy rate among younger adult cohorts like Bihar, Jharkhand, J&K, Assam and Uttar Pradesh. High illiteracy rate among younger adult cohorts in these states raises the need for reconceptualising the literacy from basic understanding of reading and writing to having a functional literacy that enables adapting to evolving changes in social, economic, political and legal spheres. Since the individuals belonging to these age cohorts are likely to enter the labour market, basic literacy might not be helpful to provide gainful employment opportunities in the light of the current pattern of service- led economic growth, which demands relatively high skilled labour.

There is also a need to broaden the coverage of adult literacy programme from the 15-35 age-groups to beyond. It was set in view of their importance for the labour market. It is also necessary for achieving the target of financial inclusion, adoption of new technologies for agriculture development; understand various government policy of social and economic development. Increasing the targeted age cohorts under the adult literacy rate becomes more important in the light of current debates of old age security as it enables the people to understand the government scheme. Apart from this, illiteracy itself is considered as one of the serious deprivations.

Measurement and Interpretation of Age Structure Adjusted Literacy Rate

Earlier section of the paper clearly brought out the negative relationship between the age cohorts and literacy rate. It is perhaps true for all levels of education and not merely for literacy alone. Even in some of the very socio-economically developed nations, the younger cohorts are relatively better educated when contrasted with older ones. This is simply because educational opportunities as well as emphasis on education have been varying over time which has an advantage for the younger cohorts. Since education is key to social and economic development of any economy, bridging regional gap in literacy has always been one of the prime focus of India's educational policy. Generally, educational development across Indian states is compared in terms of literacy rate, which is defined as the proportion of literate in the population's seven and more age-group, as an indicator. In the light of inverse relation between age cohorts and literacy, and variation in age composition of the population across states, average literacy may not be an appropriate indicator to compare educational progress across states.

The present section is an attempt to compute age structure adjusted literacy rate, following two different approaches. In the first approach, literacy rate for all the state is deflated with a reference age of the population. And, in the second, it is deflated with a reference structure of age distribution. In the first method, the average age of the population of all the states has been divided by the reference age. Thereafter, the average literacy rate of the state is multiplied with this ratio to obtain a literacy rate adjusted for the age. Let **A**

represent reference age, a_i the average age of the population for the ith state and H_i the literacy rate for the ith state. Then the adjusted rate of literacy for ith state is given by the following formula.

$$H_i^* = H_i \frac{a_i}{A}$$

Where H_i^* is the age-adjusted literacy rate.

For the purpose of the present analysis Median, defined as the value of the variable that divides the distribution into two equal parts, is used in place of average age. The median age for all the states has been presented in the Table 2. Kerala, with median value age of 32.55 years, has the oldest population as against Jammu & Kashmir, with median age of 27.81 years representing the youngest population. This distance in median age, undoubtedly, gives an advantage for Jammu & Kashmir against Kerala as regard accomplishing achievement in literacy. For the purpose of index computation, the median age of Kerala's population have been considered as the reference age and the literacy rate of all the states are re-scaled accordingly.

TABLE 2

Age Structure Adjusted Literacy Rate

State	*Median (Age)*	*Literacy Rate*	*Literacy Rate (adj.)-1*	*Literacy Rate (adj.)-2*
(1)	*(2)*	*(3)*	*(4)*	*(5)*
Andhra Pradesh	29.67	58.62	53.44	56.22
Assam	28.24	63.48	55.08	61.08
Bihar	28.67	47.14	41.52	45.12
Chhattisgarh	29.54	63.68	57.79	60.79
Gujarat	29.4	68.33	61.72	65.94
Haryana	27.92	67.08	57.53	63.13
Himachal Pradesh	29.61	75.46	68.65	73.40
Jammu & Kashmir	27.81	55.19	47.15	51.51
Jharkhand	28.64	53.28	46.88	50.59
Karnataka	29.52	65.45	59.36	63.13
Kerala	32.55	90.90	90.9	90.90
Madhya Pradesh	28.49	63.03	55.17	59.92
Maharashtra	29.85	76.14	69.83	74.28
Orissa	30.06	62.67	57.88	61.14
Punjab	29.69	68.89	62.84	66.88
Rajasthan	28.05	59.17	50.99	55.41
Tamil Nadu	31.55	72.72	70.48	71.90
Uttar Pradesh	28.00	55.51	47.75	52.31
Uttarakhand	28.28	70.77	61.48	67.07
West Bengal	29.65	68.39	62.29	66.84
India	29.22	64.30	57.72	62.04

Source: Computation is based on the data of Census 2001

Therefore, the literacy rate of the ith states is multiplied with a value which is the ratio of median age of the ith state's population and the median age of Kerala's population. Hence, we get a different literacy rate for all the state termed as "*age-adjusted literacy rate*". This age-adjusted literacy rate for all the states is given in Column 4 of Table 2.

It is clearly seen that the adjusted literacy rate is lower than the unadjusted literacy rate for all the states. But the difference between the adjusted and unadjusted literacy rate varies across states. It is highest for Haryana and lowest for Tamil Nadu. In general, the differences are higher for the states whose median age is far from the median age of Kerala and *vice versa*. Age adjusted literacy rate with respect to median age of Kerala suggests that if all the states would have same age composition as that of Kerala, this would have been their literacy rate. Contrary to the above analysis, literacy rate can also be adjusted by re-scaling the literacy rate taking the lowest age as reference. In that case, all the states will reflect an increase in their literacy rates.

An alternative method has also been adopted to compute an age structure adjusted literacy rate. This method is based on the adjustment with respect to a reference age structure. First, the overall population is classified into some definite number of groups. Thereafter, the age-group specific literacy rate is computed for all the states. Thus, the overall literacy rate can be expressed as weighted sum of age specific literacy rate and share of the specific age-group in the population. If the total population is divided in the 'n' groups, 'α_i' is the share of population of ith age-group and H_i is the literacy rate among ith age-group, then the average literacy rate for the population can be expressed as;

$$H = \sum_{i=1}^{n} \alpha_i . H_i$$

The age structure adjusted literacy rate is computed by replicating the age-specific literacy rate in a reference age structure of the population. If 'β_i' is the share of ith age-group in the population of the reference age structure and 'H_{ji}' is the literacy rate of **ith** age-group in **jth** state, then the age structure adjusted literacy rate for **jth** state is given as;

$$H_j = \sum_{i=1}^{n} \beta i . H_{ji}$$

For the purpose of the present analysis, the overall population is classified in the fifteen age-groups (10-14, 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79 and 80^{+}) taking into account the fact that literacy is defined for the population 7^{+} and, for simplicity, only population of age 10 and above has been taken into consideration for the analysis. The age structure adjusted literacy for all the states is presented in the last column of Table 1. Similar to the previous method, this method also records a reduction in the literacy rate after adjustment in all the states. However, the extent of the reduction in this method is smaller relative to the earlier method. Analogous to earlier situation, Haryana records the highest decline and Tamil Nadu, the lowest. The result obtained from this method can be considered more accurate as it is based on the distribution and not on the average, in contrast to the earlier method. The age structure adjusted literacy rate informs us that this would have been the literacy rate of all the states if their population would have followed the age structure of Kerala.

Conclusion

The present study aims to highlight the interaction between the age cohorts and literacy progress. It clearly brings out the fact that even after achieving universal elementary education, achieving the goal of full literacy is quite difficult due to the existing stock of out-of-school-age illiterate population. Thus, the study suggests having an effective adult literacy programme in order to realise the goal of full literacy. It also suggests the need to broaden the scope of the literacy programme's emphasis and its coverage beyond the 15-35 age-groups. The paper also raises the question for reliability of comparison made on the basis of average literacy rate. In this background, we computed a 'literacy deprivation index adjusted with age structure'. The new index brought out the fact that the literacy rate of all the states gets lower value when adjusted, taking the age structure of Kerala as reference.

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Appendix

APPENDIX TABLE A.1

Age Structure of the Population across State

States	*10-14*	*15-19*	*20-24*	*25-29*	*30-34*	*35-39*	*40-44*	*45-49*	*50-54*	*55-59*	*60-64*	*65-69*	*70-74*	*75-79*	*80+*	*All*
Andhra Pradesh	14.46	12.55	11.48	11.19	9.31	9.36	7.21	6.30	5.07	3.49	3.87	2.27	1.92	0.69	0.83	100
Assam	16.67	13.06	11.50	11.59	9.90	9.61	6.05	5.71	4.22	3.00	2.89	1.91	1.40	0.60	0.05	100
Bihar	18.75	12.18	10.72	10.01	9.40	8.61	7.04	5.87	4.59	3.51	3.57	2.30	1.75	0.76	0.96	100
Chhattisgarh	16.58	12.29	10.63	10.41	9.81	9.06	6.97	6.02	4.76	3.89	3.62	2.56	1.75	0.78	0.86	100
Gujarat	14.30	13.07	12.20	10.65	10.05	9.15	7.60	6.10	4.67	3.40	3.27	2.25	1.64	0.72	0.94	100
Haryana	16.60	13.96	12.11	10.72	9.35	8.67	6.85	5.35	3.90	2.70	3.03	2.73	1.99	0.92	1.14	100
Himachal Pradesh	14.44	12.83	11.94	10.60	8.86	8.42	6.77	6.20	4.88	3.86	3.57	2.64	2.18	1.16	1.66	100
Jammu & Kashmir	17.35	14.63	11.35	10.07	8.89	8.80	6.87	5.84	4.34	3.25	3.11	2.02	1.69	0.75	1.05	100
Jharkhand	17.91	12.66	10.89	10.29	9.54	8.97	7.18	6.25	4.71	3.61	3.17	2.02	1.44	0.62	0.75	100
Karnataka	14.75	12.76	11.59	10.86	9.06	9.29	7.25	6.43	5.00	3.38	3.55	2.26	1.90	0.84	1.08	100
Kerala	11.27	11.26	11.26	10.51	9.49	9.31	7.36	7.27	5.42	4.26	3.89	3.40	2.31	1.51	1.47	100
Madhya Pradesh	17.38	12.73	11.56	10.43	9.73	8.78	6.75	5.45	4.23	3.38	3.52	2.47	1.83	0.79	0.97	100
Maharashtra	14.72	12.43	11.50	10.67	9.60	9.04	7.20	5.90	4.48	3.47	3.55	3.42	2.12	0.89	1.01	100
Orissa	14.78	12.27	11.08	10.80	9.59	9.25	7.16	6.10	4.67	3.74	3.83	2.67	2.14	0.90	1.02	100
Punjab	14.54	13.12	12.01	9.99	9.08	8.86	7.36	6.03	4.60	3.17	3.44	3.01	2.25	1.03	1.53	100
Rajasthan	17.70	13.42	11.61	10.26	9.34	8.44	6.75	5.55	4.34	3.30	3.33	2.40	1.85	0.77	0.96	100
Tamil Nadu	11.72	12.06	11.31	11.15	9.14	9.59	7.38	7.04	5.49	4.35	4.00	2.68	2.01	0.97	1.08	100
Uttar Pradesh	18.62	13.39	11.11	9.84	9.02	8.18	6.71	5.54	4.45	3.42	3.58	2.43	1.87	0.79	1.06	100
Uttarakhand	16.88	14.35	11.46	9.66	8.45	8.14	6.71	5.80	4.77	3.67	3.54	2.58	1.97	0.93	1.08	100
West Bengal	15.15	12.13	11.22	11.20	9.92	9.56	7.30	6.30	4.55	3.61	3.11	2.33	1.69	0.85	1.06	100
India	**15.86**	**12.73**	**11.40**	**10.60**	**9.44**	**8.97**	**7.08**	**6.02**	**4.65**	**3.51**	**3.50**	**2.52**	**1.87**	**0.83**	**1.02**	**100**

Source: Computation is based on data of Census 2001

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Education of Poor in Kerala

— Achievements, Aspirations and Orientations[#]

Ann George[*]

Abstract

Kerala is a state celebrated nationally and internationally for delivering some basic capabilities to a majority of its people. Of such capabilities, the important ones include achieving near universal enrolment and very low drop-out rates in school education. Even historically, education was given much importance in the development agenda of Kerala. This paper examines whether the achievements in school education and the historical importance given to education in the state has led to educational achievements of the poor, in terms of enabling them to use it as a channel for upward mobility. An examination of educational mobility across three generations in a sample of poor households shows that even in the current generation, majority have not reached matriculation, the threshold of higher education. Limited formal employment opportunities in the state may raise doubts on how far the poor will be able to compete with the well-off for such jobs even if they acquire higher education. But what this study indicates is that a vast majority of the poor in our sample are not even entering the threshold of any competition at all. The habitus of poor are not conducive enough to make education a motivated pursuit in their families.

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Introduction

Kerala is a state celebrated nationally and internationally for delivering some basic capabilities to a majority of its people. It is reiterated that among its achievements of basic capabilities, a salient one is its near universal enrolment in school education and very low drop-out rates. Kerala also stood first with regard to the enrolment rate in post higher secondary education among 17 major states in India in 2004-05 (Dubey, 2008). Many studies have shown that there is no significant difference across gender and social groups with regard to education. However, there are hardly any studies on how inclusive Kerala's education system is for the poor.

This paper examines as to what extent the State's achievements in education has reached the poor and enabled them to use it as a channel for upward mobility. The study also examines the aspirations, orientations and efforts of the poor towards education. The study takes cues from the literature which examines the question of perpetuation of poverty emanating from certain common features of their lives like their low educational achievement.

The study is based on a census of 146 waste picking women workers in the Cochin Corporation and municipalities in Ernakulam district. These women were organized under the Clean Kerala Mission, one of the self -help projects of Kudumbashree, the flagship poverty alleviation programme of the state government. These women belonged to households officially identified as poor, according to the Below Poverty Line list of the state government. The educational mobility of three generations in the households of these women is examined. The methodology of the study was a combination of survey and in -depth interviews. Field work was conducted between February and August, 2008.

The paper is organized into five sections. Section 1 discusses some theories explaining low educational achievement of the poor. Section 2 gives an overview of education in Kerala. Section 3 presents educational mobility of three generations in the surveyed households. Section 4 describes the aspirations, orientations and efforts of the poor towards education. The final section presents major findings and the conclusion.

Low Educational Achievement of Poor: Some Explanations

Some scholars have examined the social and psychological functionings to explain perpetuation of poverty, which emerges from certain common features of their lives like lower educational achievement (Lewis, 1965; Murray, 1984; Young Jr, 1999). There are two schools explaining such common features found among the poor. The first is the cultural determinist school, which identifies certain characteristics pertaining to the family structure, value orientation, inter-personal relationships, spending patterns, time orientation, attitudes etc., as factors leading to low level achievements. The need for immediate gratification of wants, absence of clear- cut perspectives, absence of step-by-step planning of future, feelings of resignation etc. are some such attitudes. It identifies the breakdown of key social institutions like the family, school and church as the major factors responsible for shaping wrong attitudes and choices influencing mobility (Lewis, op.cit).

The structural school, on the other hand, emphasizes the role of structural factors as more responsible for the low achievements of the poor. Some of the factors identified are structural changes in the economy leading to unemployment, low wages, high rents,

crowded living conditions, and poor quality schools. There are also many biases held against the lower strata, especially those belonging to the minorities, which, then, place hurdles in their accessing jobs, getting houses, mortgages, credit etc (Valentine, 1965[1]).

One may consider Bourdieu's doctrine of *habitus* as an interweaving of structural and cultural stances. Habitus explicates the reproduction and/or transformation of structures in terms of a nexus between individual action and structural arrangements (Bourdieu, 1977). It explains the circular relation of individual subjectivity and structure, one shaping the other and, in turn, getting shaped.

According to Bourdieu, social class (in this case, poor) is a category that is conceptualised not just in terms of material capital (comparable to the structural factors) but also in terms of cultural capital, which people make use of to improve their positions. To him, social class should be identified, not just in terms of individuals or a group of individuals, but also in terms of the set of dispositions which it generates. What the habitus doctrine says is that the particular combination of cultural, social and material capital gives rise to a dispositional matrix of perceptions, appreciations, thoughts and understandings that shape the diversified activities undertaken by the members of a class.

One might see the characteristics identified by the cultural school (such as immediate gratification of wants and absence of clear future perspectives) as products of the habitus, according to which an individual acts in terms of a mastery of a common code of conduct (not always consciously, but could also be pre-reflexive) of what is appropriate (or allowed) in their socio-cultural environment.

The proposition of reproduction of structures of habitus is explicated in a study examining the factors inhibiting upward mobility aspirations and efforts of a group of poor young Afro-American men belonging to the inner cities of Chicago (Young Jr, 1999). Here, the author presents how the families or schools or neighbourhood of these young men were unable to provide any kind of favorable social and cultural capital, which could place them in a trajectory of education-led mobility.

Andre Beteille (2003) and Arjun Appadurai (2004) make similar observations on this subject. Examining inequality in the Indian urban context, Beteille finds the family to be the main agent which, through its transmission of cultural and social capital, reproduces inequality. The home environment of a civil servant is different from that of a watchman. According to Appadurai, differences in the mobility attempts (including educational mobility) of the poor and non-poor come from the differences in the possession of *nodes and pathways*. The non-poor segments of the society have a better navigational capacity, implying the ability to make conscious links between the more immediate and far-off aspirations, whereas the poor have lesser repositories of experiences that provide alternative pathways of mobility.

Education in Kerala: A Brief Overview

As mentioned at the beginning of this paper, Kerala's achievements of basic education, which is comparable to that of developed countries, has received much scholarly attention. The state has achieved near universal school education and has very low drop-out rates in

[1] Oscar Lewis and Charles Valentine are one of the earliest proponents of cultural school and structural school respectively.

schools. The achievements in education are laudable not just for its intrinsic value but also for its instrumental value in building other capabilities like mortality and fertility reduction, ability to emigrate etc..

Education in the state, including that of the lower strata, had received importance, historically. Modern system of education was introduced in Kerala during the late 19th century itself. The Governments [Malabar coming under direct British rule and princely states of Cochin and Travancore, coming under the indirect rule of the British] opened schools on their own (George et al., 2002). In this, they were influenced by external agencies, namely the Christian missionaries and the British Residents in the princely states of Travancore and Cochin. Christian missionaries played a crucial role in making education available to girls and the lower castes. State institutions favoured the entry of the lower castes later. By the turn of the 20th century, Travancore had considerable number of schools, with Cochin following closely. Malabar was lagging behind in this respect.

The erstwhile Travancore, Cochin and Malabar saw the rise of social reform movements of people belonging to different castes and religious groups in the second half of the 19th and early 20th centuries. Two aspects are particularly remarkable in Kerala's history of social reform movements. Firstly, the reform movements had an early historical start in Kerala as it began in the second half of the 19th century itself. Secondly, almost all the major communities in the state had reform movements. Social reform movements of the Pulayas and Ezhavas, the two major lower castes in Kerala, were the more prominent movements of the time. One aspect, which was common among all these communities, is their demand for modern education. It is these movements of the people which exerted compelling pressure on the state to adopt its progressive agenda on education.

The importance given to literacy and education is also highlighted by the state- wide progressive movements like the Library Movement and the Literacy movement. Libraries were established in every village as a result of the Library movement, which began in 1945. These rural libraries became instrumental in promoting literacy, non-formal education and several other developmental activities. The mass campaign for universal literacy by Kerala Association for Non-Formal Education and Development (KANFED) and later, by the Kerala Sastra Sahitya Parishad (KSSP), culminated in the achievement of total literacy in the state in 1991 (Pillai, 2003).

While these educational achievements are laudable, especially in comparison with other states in India, scholars are increasingly drawing attention to its serious limitations in terms of quality. There is a long way to go in order to put more substantive content to these quantitative achievements. The increase of private unaided schools is considered as indirect evidence of the quality problem in schools owned or aided by the government (George et al., 2003; Kumar and George, 2009). Yet another study done by National Council for Educational Research and Training (NCERT) ranks Kerala below 17 other states in respect of levels of learning achieved by school students (CDS-GOK, 2006: 88-89).

Educational Mobility across Generations in the Surveyed Households

This section examines the educational achievements of three generations in the families of the respondents in the sample. Here I have considered only those members of the family who are currently living in the household of the respondents. Educational levels of only those who have completed their studies are considered.

Table 1 shows improvement in the educational attainment of the members of the poor households in the sample over three generations. Among the older generation (respondents' parents and parents-in-laws), 93 percent of the females and 100 percent of the males had not completed primary education. When it comes to respondents and their spouses, the levels of educational achievement had improved. A substantial, although not the majority, (45.2 percent of respondents and 46.7 percent of respondents' spouses) had completed middle school education. In the case of the respondents' children, who have completed education, majority (58.4 percent) have completed 9th standard. However, only less than one-third of children (31.4 percent) have been able to complete matriculation and above. A mere 10.1 percent of those who have completed education had post-higher secondary education.

TABLE 1
Education levels across Generations

Education levels	*Generations*				
	Parents'/Parents in laws' education [Female]	*Parents'/Parents in laws' education [Male]*	*Respon-dents*	*Spouses*	*Children of the respondent*
Illiterate	24	8	16	6	1
Just Literate	9	4	3	2	
Class 1-3	5	1	7	12	1
Class 4 (primary level completed)			14	15	1
Class 5-6			40	22	10
Class 7 (middle level completed)	2		13	10	12
Class 8			7	14	12
Class 9	1		34	18	24
Matriculation	0		3	6	6
11th standard (Higher secondary)	0		7	2	9
12th standard (Higher Secondary-completed)	0		1		4
Graduation (Degree)	0		0	0	5
Vocational course after twelfth standard	0		1	0	4
Total number of members in each category	41	13	146	107	89

Source: Fieldwork

The enrolment ratio of children in the sample, who are currently doing post-higher secondary education (in the 18-22 years' age group), is only 14 percent. Out of the 10 people, who have gone in for post-higher secondary education, five are attending certificate course in vocational subjects, one is doing diploma in a vocational subject while three are pursuing graduation in arts and science subjects. Only one of the students is attending a professional course. One could say that participation of poor in this sample in higher education is limited. The findings are similar to the findings of two studies examining the income background of students in professional courses (CSES, 1997; Kumar, 2004). The

studies found that the students in Professional courses mostly hail from high and middle income households.

The outcome of low educational achievements has emerged as a result of weak educational inputs and investments both by the parents and the government. Parents in the well-off families spend considerable resources to get the right start for their children's education by putting them in good schools, selecting English as the medium of education and providing good tuitions. Table 2 presents the type of educational institutions in which respondents' children are currently studying.

TABLE 2

Type of Educational Institutions

	Number
Government schools	46
Aided schools	82
Unaided schools	6
Parallel college [1]	4
Regular college	1
Private Industrial Training Centre or Certificate course Polytechnic	3
Government Diploma Course	1
Self-financing professional engineering college, run by government agencies[2]	1
Total number of children currently studying	144

Note 1: Parallel colleges are run by private agencies offering private coaching for distance education programs of different universities and Boards. They also offer tuitions for failed students to enable them to appear for the next examination. Generally, it is the students with low academic record, unable to get admission in regular colleges, who study in these colleges.

Note 2: Lal Bahadur Shasthri Centre for Science and Technology is a government agency which runs a number of self-financing colleges in the state. It charges lower fees than other private self-financing colleges.

Source: Fieldwork

Table 2 shows that most of the children in the sample are being educated in government or government-aided schools, which do not charge any tuition fees. These schools are not preferred by the well-off people because there is a general impression that they offer poor quality education (Kumar and George, 2009). As for medium of instruction, most of the children (82 percent) are getting educated in Malayalam medium schools, a medium increasingly avoided by the middle class and the elite. In such a context, where knowledge of English is important for getting modern white collar jobs or moving up in the occupation ladder, studying in the Malayalam medium can put the poor at a competitive disadvantage.

When it comes to higher education, only one child in this sample has secured admission in low-fee charging government colleges. A larger number of the children have been able to get admissions only in parallel colleges, where the quality of education is below that of the government or government-aided colleges, though they charge higher fees. In the case of vocational courses too, none of the children have been able to get admission in the cheaper

government-run Industrial Training Institutes (ITI). They could join only in the private and more expensive Industrial Training Centers.

In Kerala, as elsewhere in the country, providing tuitions to the children, as an additional input, has become a common practice, thanks to the perception that education in schools is inadequate to face competition. One could see that majority of the poor in the sample (53.5 percent) are also sending their children for tuitions. However, tuitions offered to the students from the poor families seem to be of poor quality. For instance, *Priyanka*, a respondent's daughter goes for free tuitions given by a local church to the children living in slum colonies of the poor. According to her, it is difficult to get any individual attention since a lot of students of different age groups are enrolled there. Parents, however, have their own reasons to send their children for tuitions. One respondent says that as a result of tuitions, one is able to make sure that children spend at least sometime with their books rather than playing or watching television.

Educational achievement across different Categories

This section analyses the educational achievements of those who have completed education in the current generation (respondents' children), across different categories, to explore any possible relationship between them. I examine how far does type of educational institutions, parents' education, caste and gender influence educational achievement. I have classified educational achievement into 'matriculation and above' and 'below matriculation'. Table 3 shows the results in percentages.

TABLE 3

Educational achievement across different categories

	Below Matriculation	*Matriculation and above*
Type of educational institutions		
Government schools	87.5	12.5
Aided schools	54.2	45.8
Highest education of parents[2]		
Below matriculation	72.5	27.5
Above matriculation	50	50
Caste		
Scheduled Caste/Tribe	77.8	22.2
Non-Scheduled Caste/Tribe	64.1	35.9
Gender		
Female	47.4	52.6
Male	78.6	21.4

The Table shows a clear lower performance record in the government schools. Among children who studied in government schools, the proportion of those who attained 'matriculation and above' education was very low. When it comes to aided schools, one finds better performance. Nearly half of children who studied in aided schools have 'matriculation and above' education. Among the children who completed education in this sample, no one

[2] For this analysis, I have considered the education of either mother or father, depending on who has got the highest education.

studied in unaided schools. Further, the Table shows better educational performance of children whose parents have higher education.

A caste-wise analysis shows non-scheduled caste/tribe children having slightly better educational performance. As for gender, female children are clearly showing better performance. Majority of them have matriculation and above education. This is in tune with the general trend in Kerala, where girls outperform boys with regard to education (Government of India, 2005-06).

In sum, aided schools, better educational performance of parents, being in the non-scheduled caste category (despite the several benefits and scholarships accruing to them) and being a female does improve the likelihood of better educational performance of children. However, except for gender, poverty is more of an equalizer as majority of these poor children have low educational performance, regardless of the type of schools, parents' education and caste.

Aspirations, Orientations and Efforts for Education

As discussed earlier, being poor is not just about lacking material inputs but also about shaping of the several dispositions and activities of the individuals in their group. In this context, an attempt is made to examine the hopes and aspirations of the poor in the sample with regard to education. I also examined the orientations, planning, efforts or steps taken by the poor women to acquire education for their children. The questions I asked the women were whether they had more hopes or more fears with regard to their children's education as a channel of mobility and whether they think that education helps in getting better jobs for poor people like them. The questions were asked only to 115 women in the sample. Of the rest, 17 women were either not married or were not having children. In case of the rest of the women, they had children who were married and settled elsewhere or their children had completed education long before or they were too young. Table 4 presents the responses of the women to this question.

TABLE 4

Aspirations Regarding Education

	Number	*Percent*
Want education but highlight financial constraints	20	17.4
Want education but highlight non- financial constraints	12	10.4
Want to educate but no specific agenda	3	2.6
Want education but constrained by children's lack of interest	30	26.1
Realistic curtailing of desire itself	10	8.7
Desiring vocational course	2	1.7
Are skeptical about education	3	2.6
Statements of wanting education without mentioning any constraints or fears; or statements of resolve for pursuing education	27	23.5
Concrete steps taken	8	7.0
Total number of respondents	115	100.0

Source: Fieldwork

With regard to the role of education in their lives, women state their perception in very clear terms. They want to change their fate and realize the importance of education as a

channel of mobility. An overwhelming majority recalled how they would motivate their children to study by repeatedly telling them how education provided the only hope for them to escape their present predicament. Barring three women, who were sceptical about education's role in getting jobs, everyone else favoured education. At the same time, most of the women listed the different constraints in their lives which prevent the children from going in for higher education.

As we can see from Table 4, there are three types of constraints mentioned in their narratives. An important one is the financial constraint**.** Non-financial constraints like sudden death or illnesses of someone in the family, illness of the child, child's inability to learn, alcoholism of father disturbing the family atmosphere, desertion by spouse, family tensions and not being able to get information at the right time are the second set of constraints. The most important constraint is the children's disinterest in studies.

There were women who gave positive responses of optimism. In the cases of eight women, their children are aspiring for employment in the modern sector and their desire is backed by concrete steps taken. However, a majority of the women belong to the category of desiring higher education but doubtful about whether their wishes would fructify. It appears that the particular collectivity of these women has put realistic boundaries to their imaginations and hopes as found in the proposition of habitus. Box 1 illustrates the categories of responses in the respondents' own words:

A series of questions were asked to ascertain whether the respondents' desire for education gets translated into effective orientation towards attaining the same, starting with having concrete ideas or dreams for the children. Majority (67.8 percent) of the 115 women said that they did not have any specific dreams or concrete ideas about children's education and employment. This indicates *the absence of clear-cut perspectives,* a characteristic which was discussed as one of the factors responsible for perpetuation of poverty.

Even among the 37 women, who mentioned specific desires, only 13 aspired for white collar jobs and had taken some steps to attain them, like orienting the children towards that end (like the mother wants the child to be an accountant and he is doing a B.Com course) or giving 'better' education by sending children to English medium schools. The others had desires but the same were curtailed. Some of them mentioned that basic education is enough for their children. Others preferred vocational courses or some small skill-training like stitching, automobile repair etc.. There were a few who mentioned their white-collar dreams albeit in a casual manner. Their dreams were not backed by their efforts or by their statements of children's performance. Our findings are similar to those of Johnson in her study on working class women (Johnson, 2002). She notes that the practical habitus of women in her study was already well established and these women themselves usually wanted modest skills and jobs like typing.

To the question as to whether children had specific desires or concrete ideas with regard to jobs, 41.8 percent of the 55 respondents replied affirmatively[3], with only 12 of them favoring white collar jobs like those of engineer, bank accountant and nurse, that required some efforts to attain. In the rest of the cases, the choice was for a certificate or diploma in vocational subjects or, generally, studying some more without any specific plans.

[3] This question was asked only to 55 women, whose children are currently studying and who have reached at least the secondary school level of education.

Box 1 : About Aspirations with Regard to Children's Education

"There is no other way to progress (other than education), I tell my children always 'You study well and get out of this situation'. We will try our best (to educate them)". When asking her about whether she has any dreams of making her daughter a doctor, engineer or some equivalent professional, she says "Dream is there but no financial capability; no point in thinking that some people are able to become all these". [Vaija] - Want education but highlight financial constraints
"My son's grades started falling on seeing my alcoholic husband creating ruckus in the family. His eating habits and health are also affected on constantly seeing this". [Vaishali] - Want education but highlight non- financial constraints
"There is desire but one does not know how much God has plans for the children. We desire so many things; however we can only accept God's decision". [Ragini] - Want to educate but sceptical of outcome
"I want my son to pass tenth standard; but recently, he is showing reluctance to go for tuitions. I told him, it is only since I desire your education, I have to scold you. From now on, I will not keep these hopes. There are more than enough tensions in my head already, where I have to worry about debts". *[Ganga] - Want education but points out children's role with disillusionment*
"I have only limited expectations. It is not possible to invest so much in fees since daily life itself is difficult. My husband is not much interested in the children's studies. Let them study if they are interested" *[Yamuna] - Realistic curtailing of desire itself*
"I do not want to give them any 'degree education'. I want to send them for some vocational course" *[Thara] - Desiring vocational course*
"So many people, especially women, with degrees are doing no jobs". *[Banu] Mentions sceptically about education's role in getting jobs.*
"I am really having hopes for my daughters. Marrying them off will only lead them into a miserable life like mine. Want them to get a job. Even though today there is not much income and costs are high, somehow I will do some extra housemaid work, ask help from some people and educate them". *[Suruma] Statements indicating resolve for pursuing education and overcoming constraints or fears*
"My children are in higher education. I pledged the title deeds of my house for loan for my son's degree in nursing. My daughter studied M.Com and is currently working as an accountant". *[Yamini] Concrete steps taken*

Note: All names are changed.
Source: Fieldwork

An individual's educational choice is greatly influenced by those pursued by one's reference group- relatives, friends, co-workers, neighbours etc.. I asked the women in our sample whether they knew about people (within their reference group) achieving mobility

through higher education and formal jobs. Several women knew (45.2 percent of the 115 women) of people in the neighbourhood or workplace whose children secured better jobs through higher education. In this context, 23 women referred to white collar employees like cashier or clerk in a bank, teacher, nurse, police officer, vehicle inspector and military officer. A few knew people with technical jobs in Indian Space Research Organization (ISRO), WIPRO and city planning department while some knew people studying to become air hostess or having a MBA degree. A larger number of women, however, were referring only to people in lower grade white collar jobs, like accountant in small firms, blue collar workers in West Asian countries and workers in last grade government jobs.

That most of the people in their reference group have only low level jobs is important to be noted as it is the reference group which, in most cases, sets aspiration levels. The reference group of the poor does not exert pressure for attaining higher goals. People working among the poor, like a Christian nun working in a slum colony, point out that once poor people from poor neighbourhoods get higher education and better jobs, they tend to shift their residence from these locations. Thus, in the process, the children will go without role models in their vicinity to whom they have access. Similar observations have been made in other studies. Young Jr (op.cit), whose study was referred to earlier, draws attention to the kind of contacts, which the poor young men he studied, had (Ibid). They do not have much interaction with professionals or other well-educated groups. Besides, they come across dozens of unemployed men in their daily lives setting a common code of conduct. Even when there is a reference to white collar jobs, 'these one or two cases here and there' are not enough to put pressure wherein you are 'expected' to perform. As Johnson points out in her study on working class women, higher education is *wanted* by the working class parents, whereas it is *expected* by their middle class counterparts and this, the author says, makes the difference between daydream and reality (Johnson, op.cit).

The reference group of the poor is particularly worrisome in the context of Kerala. Some scholars point out how parents in Kerala devote much of their energies for *child crafting* to get their children ahead in a highly competitive education and job market (Devika, 2007). The poor are unable to do child crafting as their energies are diverted towards seeing that their children do not get into bad habits or develop irresponsible behavior. Many women, when asked about their children's education, mention how the children did not create any problems in the school. Twenty-nine women mentioned about their tensions regarding children getting into bad habits or irresponsible behavior. This is similar to what Young Jr. observes in his study, cited earlier, about parents being more worried about safeguarding their children from developing negative attributes (Young Jr, op.cit).

That the children from the poor backgrounds do not have a reference group, comprising people having high education and white collar jobs, also means that they are deprived of a network of information about educational and job opportunities. The only way in which they can compensate for the absence of this network is to make extra efforts to find out on their own from elsewhere as to what educational channels are open for them and plan ahead for meeting the requirements of these channels. Here again 70 percent of the 115 women had not made such enquiries from anyone regarding higher education. A few said that they were thinking of asking someone once their children reach the 10^{th} standard as it is the stage when things become clearer, on whether the children will continue studies at all. Children's performance in education and the costs involved are the two main factors which would be weighed in while deciding whether their education will be continued at all. Given this

uncertainty, they postpone the task of seeking information on career and higher education. *Sukumari*, a respondent, laughed off the idea while remarking how others will tease her if she tries to enquire about future educational opportunities for her child who is only in the 8th standard.

Teachers, colleagues, relatives, employers, well-off neighbours, children's friends are the categories of people with whom matters of educational channels were discussed. Suggestions were mostly pragmatic; vocational courses for education or lower-end office jobs were the ones suggested. In a few cases, teachers inform them of options like entrance coaching etc.. It should be noted that most of the women take part in the parents-teachers meetings regularly. This shows that wherever spaces have been made available, they avail those spaces, although they do not find out new pathways through their own initiative, probably getting caught in the everyday struggle of earning a livelihood. As *Anupama*, a respondent puts it tersely: "Where is the time for all that"?

Reasons given by the respondents for their children's discontinuing their education also indicate problems emanating from both structural and cultural factors. I have asked this question only to those women having at least one child, who has discontinued his or her education. Therefore, the number of respondents is only 57. Table 5 presents the reasons given by the respondents.

TABLE 5
Reasons for Discontinuing Education

	Number	*Percent*
Failure	34	59.6
Disinterest in studies	21	36.8
Family problems	3	5.3
Costs too much	11	19.3
Required for work	6	10.5
Disease of self or of family members	10	17.5
Family responsibilities	1	1.7
Total number of respondents	57	

Note 1: Total number of responses could be more than 57 because one respondent could give more than one response.
2: Percentage denotes the number of those who have given a particular response to the total number of respondents.
Source: Fieldwork

The highest proportion of responses shows failure and disinterest in studies as the major reasons for discontinuing education. While I have not explored the factors behind such reasons, these could emanate from the absence of credible sanctions and tangible incentives, as Murray suggests (Murray, 1984). In the absence of sanctions and incentives, children might do things considered as more fun-oriented but are detrimental to their studies. This, when combined with structural factors like poor schooling and teaching, crammed physical space in their houses, problematic family atmosphere and absence of role models to follow, add to the outcome of failure and disinterest in studies. Johnson, in her work, points out how during the school days of the working women, both teachers and parents were not able to show them why education was worthwhile. In such a context, some women said that they opted out of studies to get on with *real life* (Johnson, op.cit). Education might appear a rather

abstract pursuit in the absence of clear goals and perspectives combined with the financial constraints they see in their families.

In sum, one finds that while education is considered valuable, it is not becoming effective orientation for many. Even if they had effective orientation for educational attainments, it would be a real uphill task for them to attain it. A vast majority of them, 75.6 percent of the 115 respondents said that they found it difficult to arrange money for educational expenses. Even in a situation where the children are being given free education and in some cases, some additional scholarship, respondents find it difficult to meet the initial costs and other non-fee expenses.

After matriculation, vocational courses and, not to mention, professional courses are too expensive for them. The competition is tight in the limited number of government-run vocational institutes, where the fees are low. While private technical institutes are expensive, more students are, however, able to access only these institutes as they are greater in number and competition is less tough. In one of the respondent's narrative, we get cues of the possible reasons why there are only few people doing even vocational courses. *Kalavati*, recalls a time when she was wondering if she should send her son for vocational course. But on finding out the fees in the private institutes, she felt that if she could arrange for that amount of cash, she could as well bribe and get him a job right away. There is some cost- benefit calculation being done here. Where the costs turn out to be a difficult barrier in the present, they forego the option that could reward them in future.

Conclusion

This paper examined whether the achievements in school education and the historical importance given to education in the state has led to educational achievements of the poor, in terms of enabling them to use it as a channel for upward mobility. What one finds is that there is some improvement in educational achievement across generations. However, educational achievements among those who have completed education even in the current generation (which is the respondents' children), show that majority have not reached matriculation, the threshold of higher education. The enrolment ratio in post-higher secondary institutions of children, who are currently studying in this sample, was low. Limited formal employment opportunities in the state may raise doubts on how far the poor will be able to compete with the well-off for such jobs even if they acquire higher education. But what this study indicates is that a vast majority of the poor in our sample are not even entering the threshold of any competition at all. The study captures several layers of unfreedoms in the lives of the poor which retard their mobility through education. The absence of financial, social and cultural capital handicaps the poor. The habitus of poor are not conducive enough to make education a motivated pursuit in their families.

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Structural Change or Social Fluidity?

— Examining Inter-generational Mobility in Education in India

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Abstract

Capability formation through education is crucial in a competitive world to reap the so called demographic dividend. Parental influence on children's educational level is a reality that often hinders such progress. In a diverse society like India, it is also important to examine how social background influences inter-generational educational mobility and what part of observed mobility is due to structural changes in society and what part is due to exchange of 'places' between people from different social strata or social fluidity. This paper uses current econometric techniques to explore these issues in the Indian context over the last two decades.

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Introduction

Achieving a certain level of living and improving standards over time is the key to individual well-being as well as for the development of society. Development also has to be seen in terms of both growth and distributional aspect, and inequalities in individual capabilities, income, assets or occupational status hinders this process. In addition, with the modernisation of society and integration of economies, the question of social fluidity is becoming an essential aspect of development, especially in pluralistic societies like India, where historically some groups have faced economic and/or social discrimination, leading to lower income and asset possession as well as capability formation for them. To combat this, the key is to start with capability formation as it is the foundation of future livelihood and income situation. It is often found that backward social classes in India are excluded from the process of capability formation and, hence, future income-earning opportunities due to various forms of discrimination. This exclusion and backwardness transcends the boundary of the current generation and spills over to successive generations as well. Moreover, the demographic dividend that India is supposed to benefit from will surely turn into demographic nightmare if capability formation of the workforce is slow, uneven or inadequate. It is, therefore, interesting and important to look at the aspect of social fluidity and inter-generational mobility in educational levels. Under such circumstances, it becomes imperative to understand the nature of parental impact on children's educational level as well as the role of social background in influencing the magnitude of the parental impact itself. High (low) parental impact would indicate lower (higher) inter-generational mobility. Also interesting would be to examine as to what part of observed mobility is due to structural changes in the society and what part is due to exchange of 'places' between people from different social strata or social fluidity The present paper explores these issues in the Indian context by estimating inter-generational mobility in education during the last two decades, separately for different social groups and then decomposing it into structural and exchange mobility to understand the pattern and source of mobility across generations and social strata.

Current Research

Internationally, there is a substantial literature on inter-generational education mobility, mostly from developed countries. Researchers like Halsey et al (1980), Checchi (1997), Gang and Zimmerman (1999), Riphahn (2001), Schnepf (2002), Black et al (2003), Carr and Chen (2004), Dustman (2004), Checchi and Flabbi (2007) have used different methodologies to estimate educational mobility across generations and, naturally, the estimates vary considerably. Though any simplification is difficult, it is observed that mobility is higher in developed countries compared to under-developed ones.

Surprisingly, this area has remained under-focussed in Indian economic research, with one of the major reasons being absence of pan-generation data on education and allied factors. Though there are handful of studies on inter-generational mobility in occupation or education in India [Driver (1962), Bhowmik (1992), Kumar et al (2002a, 2002b), Majumder (2010), Maitra and Sharma (2009), Ray & Majumder (2010), Motiram & Singh (2012), Emran & Shilpi (2012), Hnatkovska et al (2013)], practically none have tried to decompose the observed mobility into those due to structural factors and those due to enhanced social

fluidity. The present paper is related to these works and also to those on disparity and discrimination [Atkinson (1998), Carr and Chen (2004), Borooah et al (2007), Takahiro (2007), Madheswaran & Attewell, (2007), Majumder (2010), Mukherjee & Majumder (2011)]. One major point of departure from the earlier studies, especially that by Hnatkovska et al (2013), is that it had clubbed the Scheduled Castes (SCs) and the Scheduled Tribes (STs) together, though evidence suggests that the condition of SCs are markedly different from that of the STs, both in terms of employment opportunities and income earned. Also, by clubbing the Other Backward Castes (OBCs) within the Non-SC/STs ambit, Hnatkovska's paper loses some appeal as one of the most important and fiercely debated policy decisions in recent Indian administration is extension of reservations to OBCs. In contrast, the present paper breaks down the dataset into STs, SCs, OBCs, and Others to bring out the differences among these distinct social classes, at least for the most recent dataset. In addition, Hnatkovska had considered the Head of Household as the *Father* and all children/grandchildren in the same household as *Sons*, which, in our opinion, is erroneous on two counts. First, in many cases, the head of household is the current generation, with his parents co-residing; and second, by putting children and grandchildren in the same bracket they have actually combined effect of two successive generations. We have avoided that by considering all possible successive generation adult male pairs living in a household. Thus, if person X is the head of a household residing in a household with his son Y and grandson Z, Hnatkovska treats X as the *Parent* and both Y and Z as *Sons* whereas we regard them as two pairs of father-son, X-Y and Y-Z. Similarly, if the head of household person B co-resides with his father A and son C, Hnatkovska will consider only the B-C pair while we would have two pairs – A-B and B-C. Thus, our treatment captures the inter-generational transmission of education far more accurately and elaborately than what has been attempted so far. Moreover, by decomposing observed mobility into exchange and structural mobilities, we venture into a territory that has, so far, remained unchartered in the Indian context. This paper, therefore, fills a substantial void in existing literature and complements and improves upon the past studies on mobility.

Data and Methodology

The study has used the National Sample Survey Office (NSSO) database on employment and unemployment (unit level records) for the 66th Round, pertaining to the year 2009-10, which is the culminating point of two decades of relatively high macroeconomic growth for India. As a contrast, we have also presented results for the NSSO 50th round data for the year 1993-94, the beginning of the structural adjustment process in India. Our study, therefore, provides a comparative view of educational mobility at the beginning and at the end of a high growth period of Indian economy. Family records have been superimposed on personal records so as to obtain multi-generational data on education. Thereafter, the data has been processed to provide us with the necessary information on inter-generational mobility for different social classes. Since our database is at household level, this means that we have used only those pairs of data wherein both father-son live in the same household. Further, to allow for completion of formal education in Indian system, we have selected only those persons with age greater than 20 years as belonging to '*children*' group. We have also used the educational level of father as the parental educational level. We admit that gender dimensions of this would also have been an interesting study but data constraints compel us

to restrict our scope at present. Besides, since our sample is restricted to co-resident sons, there may arise a selection bias in the data to the extent that spatial mobility and educational mobility may be linked. However, there are conflicting evidences regarding the significance of the selection bias when we ignore the split-off sons. While Thomas, Frankenberg, and Smith (2001) has reported in case of Indonesia that the split-off households are statistically different from the co-residents who are left behind, Alderman et al (2001) reports that the bias is non-significant in case of Bolivia, Kenya, and South Africa. We contend that split-off decisions are themselves random and not solely dependent on the educational characteristics of the children. We acknowledge that the results may possibly suffer from sample selection bias but data-constraints do not allow us to do much about it.

We are interested in examining how children's educational level is related to parental standards. More specifically, we want to quantify the degree of inter-generational upward mobility in education. This would be given by the percentage of children moving to a higher educational class as compared to their parents. In literature, this is done by following either the *Transition/Mobility Matrix* approach or the *Regression Approach*. We have applied both the approaches in this paper.

To understand the source of mobility, we have studied both the exchange and structural mobility computed from mobility table. Each 20+ person can have a *ij* pair associated with him/her, where *i* refers to his own educational group and *j* represents his/her father's educational level. The cells of the mobility table give the counts of persons that share each combination of *i* and *j*. The educational status of father has been treated as origin whereas status of child's current education status is considered as destination. If i indicates the rows and j the columns, then f_{ij} is the numbers of persons with origin i and destination j i.e. it is the number of persons whose father's educational status was *i*-th category whereas that of the child's is *j*-th category. For $i = j$, origin and destination are same and represents the persons who retain their parental educational status and may be considered as static or immobile. On the other hand, the upper right segment of the mobility matrix represents upward mobility ($j > i$), and the lower left part of the matrix represents downward mobility ($j < i$).

Most commonly used mobility table is presented in two different ways – either through calculation of percentages distribution within rows or within columns of the table. Generally, the term used for the row percentages is outflow percentage (or outflow matrix) and, for the column percentage, it is called inflow percentage (or inflow matrix). Outflow percentage gives the outflow of individuals of common origin i.e. distribution of destinations for each category of origin. In other words, it gives the percentages of children whose parental educational groups are same but their destinations are different. On the other hand, inflow percentages record the distribution of origin for each destination. It provides information of a particular destination class of children coming from different parental backgrounds. Inter-generational mobility, measured by such mobility tables/transitional matrix, are the result of two different types of flows or movement – *structural movement* and *exchange movement*.

Structural *mobility* defines changes in the positions of individuals that take place as a result of differences in proportions of members in hierarchical (education) groups between two generations (Janicka and Furdyna, 1977). It results from overall shifts in the educational status or increase in the opportunity available to all. Such a quantitative and qualitative alteration in educational structure is, perhaps, a result of changing demand for various kinds

of jobs and changes in required skills or qualifications. Structural mobility is, thus, a result of structural changes that has affected the society in general over time.

Exchange mobility denotes changes in position of individuals consisting of substitution as a result of vacating of position in specific educational groups by those who do not inherit their father's position. Exchange mobility is defined as that portion of total change in educational status between two generations that is independent of structural change.

As mentioned earlier, the diagonal elements of the matrix represent no change in education status of children compared to their fathers. f_{ij} indicates sons who have moved to i-th group from j-th group across generations and f_{ji} indicates sons who have moved to j-th group from i-th group across generations. Therefore, Min (f_{ij}, f_{ji}) would indicate the number of sons who have merely exchanged positions between two groups across generations and would measure exchange mobility. The sum of all such minimum of cross pairs (f_{ij} and f_{ji}) represents the exchange of place of status among all educational groups between generations. This we call the matched pair, which represents *Exchange Mobility*. In order to get estimates of structural movement, we deduct the sum of matched pair from figure of total upward mobility (sum of all the upper right cells of diagonal elements) This we call unmatched upward movement, which represents *Structural (upward) Mobility*.

Observed Upward Mobility (OUM) = Exchange Upward Mobility (EUM) + Structural Upward Mobility (SUM)

EUM measures the fluidity observed in educational status between two generations that is independent of structural changes of the society.

SUM = OUM – EUM and measures structural shifts of the society.

At a policy level, one can think of SUM as results of growth of the society and expansion of the educational system as a whole, and EUM as results of focussed policy interventions and affirmative actions to widen the base among historically disadvantaged sections. Why is it important to distinguish between the two? Exchange mobility necessarily involves switching of places – equal number of people moving down the hierarchy as are moving up. High exchange mobility is a sign of social fluidity but keeps the aggregate human capital endowment almost stagnant. On the other hand, Structural Upward Mobility indicates net increase in number of persons with higher educational levels compared to their parents and, therefore, high level of this type of mobility indicates improvement in human capital endowment of the society and would be desirable. Let us now explore the results in detail.

Educational Attainment in India

The educational attainment levels of the people are substantially lower by international standards. According to our figures, which consider people of above 20 years age, even in 2009, more than 30 per cent of them were illiterate, and only about 28 per cent had completed secondary schooling. Among them only eight per cent have passed higher secondary and another eight per cent completed graduation or higher levels of education.

Within such low standards, the situations of the excluded castes are still worse. Among these classes, 35 per cent of the OBCs, 48 per cent of the STs, and 45 per cent of the SCs are illiterate, as compared to only 20 per cent for the advanced castes (Table 1). Education upto the secondary school level has been acquired by only about 14-25 per cent of the excluded class persons. Only 9–14 percent of persons from these classes had completed higher

secondary level of education, as compared to nearly 30 percent of persons from the advanced castes.

TABLE 1

Educational Attributes of Different Groups in India - 1993-2009 (%)

Generation Group	*Educational Group*	*1993*				*2009*			
		ST	*SC*	*OBC*	*GEN*	*ST*	*SC*	*OBC*	*GEN*
All	Illiterate	50.1	41	NA	20.9	48.2	45.3	35.4	20.4
	Literate below Pr	8.2	8.4	NA	6.6	11.2	10.1	10.2	7.8
	Primary Passed	8.6	8.9	NA	8.4	12.3	13.9	12.8	12.5
	Middle Passed	15.9	19.6	NA	22.1	12.1	13.7	15.8	15.3
	Secondary Passed	8.0	11.2	NA	17.6	7.4	7.6	11.2	14.8
	Hr Sec Passed	6.4	7.6	NA	12.2	5.6	5.3	8.0	12.9
	Grad & above	2.9	3.4	NA	12.2	3.2	4.2	6.5	16.3
Fathers	Illiterate	66.3	71.3	NA	40.2	69.4	68.7	56.3	39.2
	Literate below Pr	15.6	13.7	NA	18.9	11.1	9.7	11.0	10.4
	Primary Passed	8.7	8.2	NA	14.1	8.1	8.9	11.5	12.8
	Middle Passed	5.3	3.3	NA	10.6	5.3	5.6	9.6	12.8
	Secondary Passed	2.6	2.0	NA	8.7	3.4	3.6	6.4	11.0
	Hr Sec Passed	0.9	0.8	NA	3	1.5	1.7	3.1	6.0
	Grad & above	0.6	0.7	NA	4.5	1.2	1.8	2.1	7.8
Sons	Illiterate	33.7	43.5	NA	17.9	37.4	33.6	23.7	13.7
	Literate below Pr	12.3	12.7	NA	9.6	11.6	10.9	10.8	6.8
	Primary Passed	14.5	13.9	NA	12.8	14.0	16.3	13.9	11.8
	Middle Passed	17.2	14	NA	19.6	15.4	17.3	18.7	16.3
	Secondary Passed	10.6	7.7	NA	16.5	9.8	9.4	14.3	17.2
	Hr Sec Passed	8.2	6.0	NA	12.3	7.5	7.1	10.3	15.1
	Grad & above	3.6	2.2	NA	11.3	4.3	5.4	8.3	19.0
20-40	Illiterate	59.4	50.6	NA	29.6	40.0	36.4	27.2	14.7
	Literate below Pr	9.7	10.7	NA	9.7	11.3	9.7	9.4	6.8
	Primary Passed	10.4	11.5	NA	12.4	13.6	15.7	12.9	12.4
	Middle Passed	9.8	12.7	NA	16.7	15.3	17.2	18.3	16.4
	Secondary Passed	4.9	7.4	NA	13.2	9.0	9.1	13.4	15.8
	Hr Sec Passed	4.0	5.0	NA	9.3	7.2	6.8	10.6	15.9
	Grad & above	1.8	2.2	NA	9.2	3.6	5.2	8.1	18.1
40+	Illiterate	73.9	76.7	NA	46.2	63.9	61.4	48.7	29.0
	Literate below Pr	12.6	8	NA	10	11.0	10.8	11.5	9.3
	Primary Passed	6.9	5.6	NA	11.8	9.6	10.6	12.6	12.7
	Middle Passed	2.5	6.5	NA	11	7.4	11.7	13.7	11.2
	Secondary Passed	3.2	1.8	NA	9.7	4.2	4.9	7.7	13.4
	Hr Sec Passed	0.1	0.6	NA	4.0	2.7	2.5	3.9	8.3
	Grad & above	0.9	0.9	NA	7.2	2.5	2.3	3.8	13.6

Source: Author's calculations based on Data Sources mentioned in the text.

Even so, women are placed much below men in terms of educational attainment, female illiteracy being much higher (44.3 per cent in 2009). Only 22 per cent of females completed secondary schooling whereas for males, this percentage is much higher (35 per cent). Such gender disparity is more prominent among the backward communities relative to the advanced caste. On the other hand, the magnitude of gender disparity is much lower for advanced group compared to excluded groups and reduction in gender gap also marginally higher. Predictably at the upper educational levels, female accomplishment is poorer compared to that of male and the disparity seems to be persistent over the period for all groups.

There are, however, disparities among different generations and age groups regarding educational levels. Children and young people seem to have better educational levels than their parents and persons in the older age group. Illiteracy is much higher among fathers (53.6 per cent) compared to sons (23 per cent) in 2009. The improvement in educational attainment witnessed is more prominent among the advanced castes and marginal among the excluded castes. Whether this is because of inter-generational stickiness will be examined next.

Inter-generational Mobility

Transition Matrix Approach

We are more interested in examining how children's education is related to parental standards. More specifically, we want to quantify the degree of inter-generational upward mobility in education. This would be given by the percentage of children moving to a higher educational class as compared to their parents. The cross-tabulation of children's parameters with parental parameters yields the following results.

It has been observed that substantial upward mobility is present in terms of educational attainment levels. About 60 per cent of the sons in 1993 had higher educational levels as compared to those of their fathers, whereas in 2009, close to 70 per cent of the sons have higher educational level than their fathers (Table 2). Mobility has, therefore, consistently improved during the 1993-2009 period. However, social disparity in educational mobility is noticeably changing over the period. Upward mobility was quite lower for the excluded classes as compared to the advanced classes in 1993 and, among them, mobility of the SCs was even lower. In 2009, the gap between excluded and advanced classes has become almost negligible, which is remarkable. The gap between the SCs and the STs has also narrowed down considerably during this period. This indicates that for new male entrants, the probability of reaching a higher educational standard than that of their fathers is almost equal for the advanced and excluded classes, which, surely, is a welcome trend. Another noteworthy fact is that OBCs, especially the 20-40 years' age cohort, exhibit a trend similar to the excluded groups and justifies their separating out from the advanced castes in this paper. Another interesting feature emerges if we look at the age-cohorts. For the advanced classes and the OBCs, mobility is higher for the older age-cohorts compared to the 20-40 years' age cohort. On the contrary, for the excluded classes mobility is higher among the younger age cohort. This indicates that the improvement in educational levels among the advanced classes and OBCs had taken place during the pre-1970 period and hence the younger age cohort has lower mobility levels compared to the older ones. But the excluded classes have been late-starters and educational improvement among them have taken place mainly in the 1970-90 period, making the younger age cohort more upwardly mobile than

the older ones. The time lag between the two classes is also noteworthy as it indicates the presence of two countries within one – one country, that of the socially excluded classes, living 20 years behind that of the other dominated by the advanced classes.

TABLE 2

Upward Educational Mobility of Sons of Different Age-Cohorts in India - (%)

Social Groups	*All Age-Group*		*20-40 Age-group*		*40+ Age-group*	
	1993	*2009*	*1993*	*2009*	*1993*	*2009*
Scheduled Tribe	54.6	70.6	54.9	70.6	40.3	71.6
Scheduled Caste	47.5	68.6	47.9	69.4	34.2	51.0
Other Backward Classes	-	70.8	-	70.7	-	72.5
General/Advanced Class	62.0	66.3	61.9	65.7	66.7	74.4
Aggregate	59.8	68.9	59.8	68.8	62.3	70.3

Source: Author's calculations based on Data Sources mentioned in the text.

Regression Approach of Measuring Educational Mobility

The Model

We want to look into the factors on which son's education depends and how family background and parental influence plays the role. In the model, we have considered son's completed years of schooling as the dependent variable. Completed years of schooling of father and mother are taken as explanatory variables. In order to assess the impact of economic status of the family on son's education, we have considered a dummy variable which represent poverty status, a dichotomous variable. Those families, whose monthly per capita consumption expenditure is below the Planning Commission stated official poverty line in terms of MPCE, are considered as poor (BPL) families. As the father's occupation status is also an important determinant of both economic condition as well as social strata on which the household belongs, we include it as an explanatory variable. This is done using two dummies – one if the father has Pink collar jobs and another if the father has White collar jobs, the control group being Blue collar jobs.[1] Apart from these factors, we hypothesise that the social background in terms of caste status also have a major role on child's educational achievement and have included caste dummy and its interaction effect with father's education in the model. The following is the complete model:

$$CY_{Ch} = \alpha + \beta_F CY_F + \beta_M CY_M + \theta_{F1} Occ_{F1} + \theta_{F2} Occ_{F2} + \pi \text{ Pov Dummy} + \alpha_0 ST_D + \alpha_1 SC_D + \alpha_2 OBC_D + \gamma_0 CY_F * ST + \gamma_1 CY_F * SC + \gamma_2 CY_F * OBC$$

[1] The Occupational categories used in NSSO and our study relates to the Indian NCO-1968 classification where workers have been divided into 10 occupational classes. Arranged in descending order of hierarchy, economic status and prestige, these are – Technical & Scientific Personnel, Professionals, Administrative, Clerical, Sales, Service, Farmers, Production related, Transport, and Labourers not elsewhere classified. We have grouped them as follows: White Collar – Technical & Scientific Personnel, Professionals, Administrative Workers; Pink Collar – Clerical, Sales, and Service workers; Blue Collar – Farmers, Production related workers, Transport, and Labourers not elsewhere classified.

Where,

CY_{Ch} = *Completed Years of Schooling of Son*
CY_F = *Completed Years of Schooling of Father*
Occ_{F1} = *Occupation Group Dummy 1 of Father (=1 if Pink Colour Job, 0 otherwise)*
Occ_{F2} = *Occupation Group Dummy 2 of Father (=1 if White Colour Job, 0 otherwise)*
Pov Dummy = Poverty Dummy (=1 if Poor, 0 otherwise)
ST_D = *ST Dummy (=1 if ST, 0 otherwise)*
SC_D = *SC Dummy (=1 if SC, 0 otherwise)*
OBC_D = *OBC Dummy (=1 if OBC, 0 otherwise)*

The coefficients β_F and β_M represents the impact of father's and mother's education on child's education. Basically it represents stickiness, with higher the value of β, higher the stickiness, and less the inter-generational mobility. θ_{F1} and θ_{F2} represent the impact of father's occupational status on child's education. α_0, α_1, α_2 denote the base level differences between social groups in child's education achievement. The value of the co-efficient π represents how being poor affects child's schooling. $\gamma_0, \gamma_1, \gamma_2$ represent the differential impacts of father's education for different social groups.

Results

Table 3 gives us the results of regression analysis for the year 1993 and 2009. The value of the constant term represents the base level years of schooling for the advanced class/ general class. It is found that son's base level years of schooling was 3.761 in 1993 and 6.735 in 2009. Thus, it can be said that over the study period, the base level of educational achievement is increasing. The value of β_F , i.e. the impact of father's education on child is 0.433 in 1993 and 0.277 in 2009. Both values are statistically significant, indicating significant influence of father's educational background on child's education and existence of stickiness. The strength of such stickiness is also observed to be decreasing over the study period. It appears that father's education had a greater role on child's education in initial years compared to recent times.

The economic status of the household also significantly affects the child's years of schooling. The base school level is nearly 30-40 per cent lower for the households below poverty line compared to non-poor families in both the periods. It is also interesting to note that the negative impact of poverty on education has increased over time indicating perhaps increasing cost of education in recent times.

The coefficients of social group dummies measure the difference in child's years of schooling between advanced class and the excluded classes. In all the periods, the values are significant and negative. This indicates that base level schooling is significantly lower for the excluded classes compared to the advanced class. Among the excluded classes, the base level is substantially lower for the STs compared to SCs and OBCs. The difference seems to have reduced marginally over the period.

The coefficients of parental occupation group dummies measure the difference in child's years of schooling between parents from relatively higher and lower occupational strata. In both the periods, the values are significant and positive, indicating that schooling is significantly higher for children whose parents are in higher occupational groups (white and pink collar jobs) compared to the lowest occupational group (blue collar jobs).

However, our main focus is examining difference in inter-generational mobility across social groups. The interaction coefficients of social group dummies with father's education provide the difference of impact of father's education across social groups. All these interaction coefficients are positive and significant, indicating that the parental influence is

much higher for the excluded classes compared to the advanced group, i.e. stickiness is higher for the backward classes and, thus, mobility is less for them. It is observed that this additional stickiness for the excluded classes has been declining over time, indicating that mobility rates are coming closer across social classes in recent times. This is surely a welcome trend, but unless mobility rates of excluded classes are higher than the advanced classes, convergence of educational achievement levels will not be possible since the former have started from a much lower level.

TABLE 3

Regression based Estimates of Stickiness of Son's Education

Dependent variable : son's completed years of schooling		
Independent Variables ↓	*1993*	*2009*
(Constant)	3.657** (2870.3)	6.584** (3885.3)
Father's completed years of schooling	0.429** (2338.2)	0.265** (1532.2)
Mother's completed years of schooling	0.309** (1365.8)	0.218** (1627.4)
Poverty Dummy[1]	-1.274** (1185.4)	-1.875** (2198.7)
Father's Occupation[2]		
Pink Collar	0.628** (456.8)	0.375*** (352.6)
White Collar	0.216** (135.2)	0.372*** (285.7)
Social Group[3]		
ST dummy	-1.512** (675.6)	-1.053** (524.8)
SC dummy	-1.023** (656.7)	-0.883** (512.7)
OBC dummy		-0.734** (524.8)
Interaction[4]		
Father's completed years of schooling * SC Dummy	0.071** (152.7)	0.039** (115.6)
Father's completed years of schooling * ST Dummy	0.121** (175.6)	0.062** (246.5)
Father's completed years of schooling * OBC Dummy	na	0.071** (365.8)
F Value	$42.6X10^5$ **	$52.3X10^5$ **
Adj R Sq	0.363	0.352

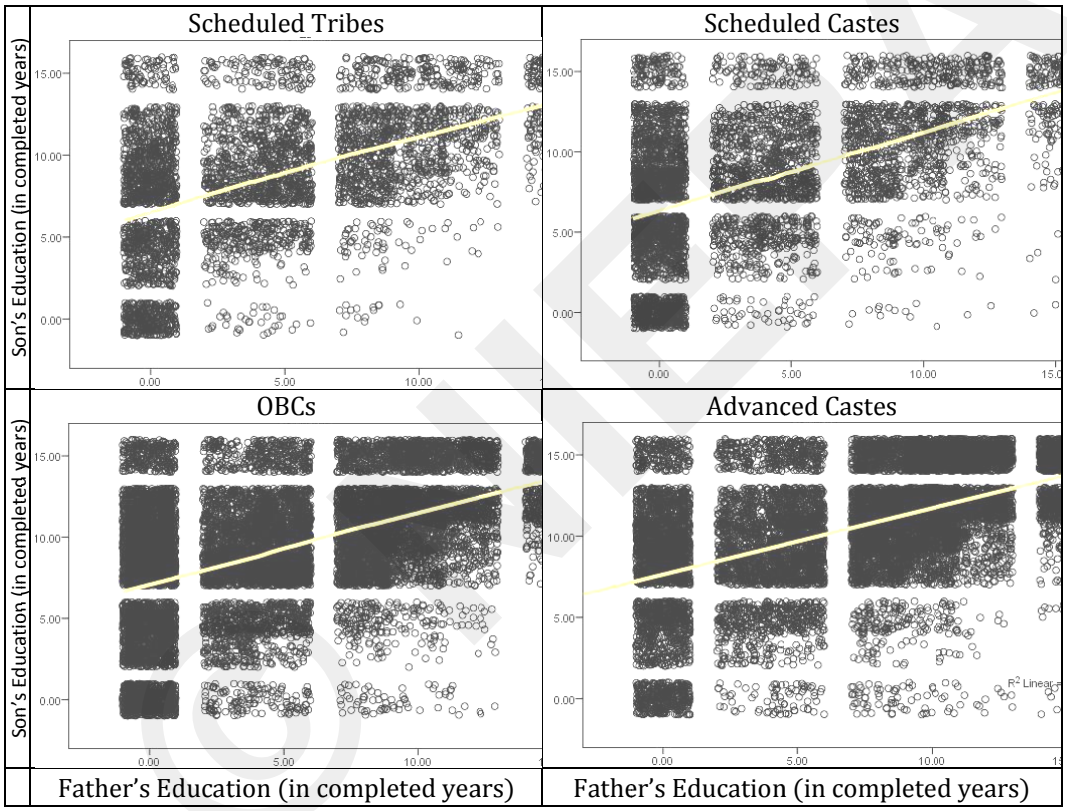
Note: Figures in parenthesis are t-values; * and ** denotes significance at 10 per cent and 5 per cent levels respectively; 1 – control group Non-poor; 2 – Control Group Blue Collar Jobs; 3, 4 – Control group General/Advanced/Upper Caste.

Source*:* Author's calculations based on data sources mentioned in the text

This is also clear from the Lowess plots that map son's educational level against father's educational level, separately for the four social groups (Figure 1). It is evident that there is considerable stickiness between the two, though a positive intercept of the fitted line indicates upward mobility also. This stickiness, as indicated by the slope of the fitted line, is highest for the SCs, followed by the STs and OBCs.

FIGURE 1

Lowess Plots of Son's Education with Father's Education - 2009



Source: Author's calculations based on data sources mentioned in appendix

We have also computed index of inter-generational mobility (as the inverse of parental impact coefficient or degree of stickiness) from the regression results (Table 4). Inter-generational mobility in education is observed to be increasing over the years for all the social classes.

TABLE 4

Derived Mobility Index from Regression based Estimates

Social Groups	*1993*	*2009*
Advanced Class	2.3	3.6
Scheduled Caste	2.0	2.9
OBC	-	2.9
Scheduled Tribe	1.8	3.1

Note: Mobility Index are derived as reciprocal of degree of stickiness.
Source: Author's calculations based on Table 3

Structural and Exchange Mobility

General trend

We have earlier noted that the main focus and contribution of this paper is on decomposing observed mobility in education into that due to *Structural Mobility* and *Exchange Mobility* and comparing the relative contribution of them. Using methodology discussed earlier, Tables 5a and 5b provide us the results of decomposing *Upward Mobility* into its components.

TABLE 5A

Decomposing Upward Mobility into Structural and Exchange Mobility - 1993

Social Group	All Age Group			20-40 Age Group			40+ Age Group		
	SUM	EUM	TUM	SUM	EUM	TUM	SUM	EUM	TUM
Scheduled Caste	41.9	5.6	47.5	42.2	5.7	47.9	30.0	4.3	34.3
Scheduled Tribe	49.1	5.5	54.6	49.3	5.5	54.8	37.3	2.9	40.2
Other Backward Classes	-	-	-	-	-	-	-	-	-
General/Advanced Class	52.9	9.1	62.0	51.9	10.1	62.0	58.5	8.2	66.7
Aggregate	51.5	8.3	59.8	50.5	9.3	59.8	54.7	7.6	62.3

Source: Author's calculations
Note: SUM – Structural Upward Mobility, EUM – Exchange Upward Mobility, TUM – Total Upward Mobility

TABLE 5B

Decomposing Upward Mobility into Structural and Exchange Mobility - 2009

Social Group	*All Age Group*			*20-40 Age Group*			*40+ Age Group*		
	SUM	*EUM*	*TUM*	*SUM*	*EUM*	*TUM*	*SUM*	*EUM*	*TUM*
Scheduled Caste	64.3	6.3	70.6	64.1	6.5	70.6	68.3	3.2	71.5
Scheduled Tribe	61.5	7.1	68.6	63.0	6.5	69.5	41.6	9.5	51.1
Other Backward Classes	62.4	8.4	70.8	62.3	8.4	70.7	63.9	8.6	72.5
General/Advanced Class	56.5	9.8	66.3	55.5	10.1	65.6	68.6	5.8	74.4
Aggregate	60.3	8.5	68.8	60.1	8.3	68.4	61.4	9.0	70.4

Source: Author's calculations

In 1993, upward exchange mobility in education in India was 8.3 per cent, which implies that 8.3 per cent of sons attained higher educational status compared to their fathers whereas same 8.3 per cent of sons downgraded to lower educational status relative to their fathers. This 8.3 per cent of sons had, therefore, actually switched places. On the other hand, 51.5 per cent of sons were able to achieve higher educational status relative to their fathers because of structural mobility. This structural mobility is mainly due to growth of educational infrastructure, better access to educational institutions, and expansion of education sector as a whole, creating new educational opportunities across the board. Exchange mobility has marginally increased over the study period to 8.5 per cent in 2009 while, during the same period, Structural Mobility has increased to over 60 per cent. It is, thus, clear that most of the upward educational mobility observed in India came from structural mobility and, over the period, its contribution is increasing whereas the contribution of exchange mobility is lower and has a stagnant trend. This structural change in education sector can be attributed to higher investment in both public and private education. Our results are corroborated by the fact that we observed a strong positive correlation between educational mobility and per-capita expenditure on education across the states. Higher aspiration and continuous demand for higher qualification/educational status at the time of (jobless) growth in post- reform era and the search for higher qualification/degree to enhance human capital and improve probability of employment may also have played a role in this regard.

Social Stratification

Differences between the social classes in terms of educational mobility are quite stark. The OBCs have benefitted the most over the years and have shown substantially higher mobility rates than the average. Among the social groups, both structural and exchange mobility was higher for the advanced castes compared to excluded classes in 1993. In 2009, however, SUM is lower for the advanced castes while EUM is highest. This is expected since they, as a group, are already at higher rungs of the educational ladder and whatever mobility is observed for the advanced castes is mainly due to exchange of places within the group. At the same time, it is observed that in both the periods the contribution of structural mobility to total upward mobility is much higher than contribution of exchange mobility among all social classes. It is also noted that the contribution of structural mobility is slightly higher for backward groups compared to the advanced group while contribution of exchange mobility is lower for the backward classes. This is especially true for the Scheduled Castes where EUM is just 6.5 per cent in 2009 compared to almost 10 per cent for the advanced castes while SUM is the highest among all social groups. For the STs, on the other hand, EUM is higher but the SUM is considerably lower, leading to lower overall mobility. Thus social fluidity *within* the Scheduled Castes is much lower, and for them the structural improvement is the main reason behind rise in educational level over generations. On the contrary, STs show greater fluidity within themselves and seem to have benefitted less from the structural shifts in the society. This also underlines the importance of state-sponsored educational expansion policies for the marginalised sections of the society and the Right to Education Act has to be hailed for constitutionally ensuring this.

Age Cohorts

The situation of educational mobility in different age groups/cohorts is also studied by looking at the 20-40 years and 40+ years age groups. It is observed that in 1993, structural upward mobility in education was 50 per cent for the younger age group and 54 per cent for the older age cohort. On the other hand, exchange mobility was about nine per cent for younger one and 7.6 per cent for the older group. In 2009, structural mobility increased substantially for both age groups, though its contribution is much higher for the younger age cohort. The magnitude and contribution of exchange mobility has declined for the younger age cohort while increasing for the older one. This supports our earlier inference that mobility in recent times has been driven by upward structural shifts.

Conclusion and Policy Discussion

We, therefore, find existence of considerable parental impact and persistence in educational levels across generations, albeit with a declining trend. The economic status of the household also significantly affects child education – base level education nearly 30-40 per cent lower for poor households compared to non-poor ones. Parental influences are much larger for excluded groups than advanced caste households, especially for the Scheduled Castes. Educational mobility was remarkably low for marginalised groups during initial year of 1990s but has improved during two decades of high economic growth in India. However, there is a marked difference within the marginalised groups in terms of mobility and persistence. In spite of significant inter-generational persistence, mobility rates have improved remarkably for the SCs. But similar trend is not observed for the STs who are much more spatially isolated. The contribution of structural mobility is relatively higher and is increasing, indicating that most of the mobility is a result of structural shifts in the society. Public policies that seek to universalise elementary education, expansion of educational infrastructure and manpower through the *Sarva Shikhsa Abhiyan* have played a crucial role in improving mobility. The regime of relatively high economic growth in post-reform era has also been more biased towards skilled manpower, leading to greater demand for educational attainment and aspirations among the youth. This has also supported higher levels of upward educational mobility in recent times. This also explains the difference in the trends exhibited by the SCs and the STs. Being spatially more isolated, most often in the forest villages, STs have not benefited as much by the greater availability of educational institutions and teachers as the SCs who geographically reside alongside the advanced social classes. The discrimination and social exclusion that SCs faced earlier have diminished substantially in its impact in recent times and enabled them to take advantage of the expanding educational system. It is, thus, quite clear that inter-generational educational mobility has picked up in India, but we still have scope for improving the position of the marginalised social classes. The policy lessons that we can derive from the experience so far is that broad-basing the educational system is the most crucial factor in creating upward educational mobility. Increased access and better-equipped schools will enable more children to stay back in formal education compared to their parents. In this regard, effort should now be made to bring the STs into mainstream educational system by arranging for camp-schools and boarding schools for those staying in isolated hamlets. Economic growth and poverty reduction will also cut down on drop- out and enable higher average years of

schooling. Both macro improvements and interventions at the micro-household level will be necessary to boost upward educational mobility. Only then the dream of reaping demographic dividend will be fulfilled.

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RESEARCH NOTES/COMMUNICATIONS/COMMENTARY

Quality of Elementary Education in Rural Area of India

— Results from Annual Survey Education Report (ASER) 2010

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Abstract

Rationale- The quality of education at the foundation level plays an important role in the development of human resources. This study examines the state-wise status of elementary education of schools situated in rural areas of India based on the students achievement performances on own regional language, mathematics and everyday calculation test.

Method- In order to measure the achievement performances of students enrolled in Std- I to VIII, the present article used principle component analysis on original 14 correlated variables to generate four factors. The standardized regression factor score of four factors, generated from principle component analysis, is used to measure the status of education at elementary level for different states.

Results- By considering the average score of four factors in principle component analysis, the study found achievement performance of rural students enrolled in elementary levels weak in states like Kerala, Puducherry, Himachal Pradesh, Maharashtra, Tripura, Punjab, Mizoram, Sikkim, Rajasthan, West Bengal, Bihar and Gujarat. However, the states like Andhra Pradesh, Uttar Pradesh, Uttarakhand, Chhattisgarh, Assam, Haryana, Goa, Jharkhand, Daman and Diu, Arunachal Pradesh, Nagaland, Tamil Nadu, Meghalaya, Orissa, Karnataka and Manipur are good in educational achievements as their average factor score remains above 0.

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Introduction

The multi-dimensional growth of a nation depends upon the presence of the skilled and dynamic human resources. The presence of dynamic and intellectual human resources can contribute significantly to make the country shine qualitatively in a bottom up approach. It is education that helps to produce energetic human resources to achieve the goals while helping in maintaining sustainable "growth with equity" by providing the fruits of development to all. Education is the foundation for a vibrant democracy in which informed citizens exercise their franchise to support the internal growth of the nation and its constructive role in the world community. It supports growth in productivity, incomes and employment opportunities as well as the development, application and adaptation of science and technology to enhance the quality of life. Improvement in education is not only expected to enhance efficiency but also augment the overall quality of life. Instead of deriving these advantages of education, the third world countries are still now unable to provide good education opportunities to all in a qualitative manner. A number of developing countries have a dismal record on the delivery of basic services like education, health and sanitation despite the fact that governments as well as donor agencies have channeled significant resources into these services (WDR, 2004). The experience of many developing countries, including India, shows that children do not master basic literacy and numeracy even after four and five years of schooling. On the one side, India has 22 percent of the world's population, and, on the other, it has 46 percent of the world's illiterates, while being home to a high proportion of the world's out-of-school children and youth (Census, 2001). It hampers the development of human resources, making education stand at the cross roads.

The Sarva Shiksha Abhiyan (SSA), which is a nationwide government scheme initiated in 2001, envisages to strengthen the pyramid and universalize the quality of education. While the Sarva Shiksha Abhiyan aims to achieve universal elementary education of satisfactory quality by 2010, the mid-day meal (MDM) supports it by way of enhancing attendance of children and, simultaneously, improving their nutritional status. This leads to providing access to education to 98% at the primary level while reducing out of school children 3 to 4% of 6-14 age cohorts. The Gross Enrolment Ratio (GER), that was 82.4 in 2001 has increased to 93.5 in 2005, with increase in 11.1% in the elementary level of education of Std-I to Std-VIII in India. There is reduction of out-of-school children from 3.20 crores in 2001 to 0.70 crore in 2007 (Planning Commission, 2007). However, even as the quantity of education has increased over time, the quality of education, especially primary education, remains a cause for serious concern. In order to ensure useful, relevant, and quality education, the Sarva Shiksha Abhiyan programme provides support for teacher recruitment and training, curriculum/textbook renewal, development and distribution of teaching-learning materials, annual school grants, pupil assessment systems, remedial teaching, computer-aided learning, establishment of decentralized academic resource support centers, distance education, monitoring and research activities related to quality issues.

This paper used Annual Survey Education Report (ASER) 2010 to measure the state-wise status of education at elementary level (Class I to VIII) in the rural area. In order to measure quality of education, the study included 14 variables related to student's achievement test in percentage of different subjects like own regional language, Arithmetic and everyday calculation test at the elementary levels of the schools situated in rural area. However, by using Principal Component Analysis (PCA), the study explored four factors

from original 14 correlated variables relating to rural students' achievement performance in different subjects. In the end, the standardized regression score of four factors was further used in hierarchical cluster analysis to measure the similarity in education at elementary levels in different states of India.

Review from past studies

The question of how to improve the quality of educational attainment in schools has become one of utmost importance to policy-makers. It is generating a large body of research, previously in developed, but now also in developing countries. Teachers, with higher educational qualifications and more secure employment, can be expected to be more motivated to perform. There is also evidence that they are also more prone to be more absent from schools (Chaudhury et al, 2004). The type of school management, i.e. whether the school is a government, private aided or private unaided school, has also been found to be a significant predictor of educational outcomes in the Indian context. According to existing empirical evidence, private unaided schools in general outperform public schools (Kingdon, 1996; Smith et al, 2005; Tooley and Dixon, 2006). Some studies find that boys and children belonging to the upper castes perform better than others (Dreze and Kingdon, 2001; Aggarwal, 2000; Filmer et al, 1997). Household wealth and parents' education also have positive correlation with children's educational outcomes (Pritchett and Filmer, 1998). Interventions that provide physical resources alone are not enough to improve outcomes if workers delivering the service do not perform as expected. With the aim of increasing the accountability of public workers, various Indian states have decentralized control over local public services to local communities, resulting in improving the attendance rates (Goyal, 2007). The NCERT (2006) baseline surveys across Indian states found that the average scores of students are between 40 to 60 percent on curriculum- based math and language tests. It affects the learning achievements in both primary and secondary schooling, signaling poor quality schooling (Kingdon, 2007). According to the ASER survey, there are 67 percent of children enrolled in Standard 3 to 5 who cannot read a simple text (ASER, 2005-2006). The mean score of students enrolled in Class- IV & V is less than 40% on language and math test. The average score in language and math test of students enrolled in private school are 50 to 60% as compared to 40% for students enrolled in government school. The achievement performances are high for boys and students of general category (Goyal, 2007). After the completion of one decade in Sarva Shiksha Abhiyan (SSA), there is, no doubt, an increase in quantitative access to education for elementary stage in comparison to the quality.

This paper does not comment on the aim of providing education for all through "Sarva Shiksha Abhiyan" (SSA) towards achieving the millennium development goal or Vision 2020 of strengthening elementary education in India. In fact, we want to know the impact of increase in quantitative growth of education through increasing the school building and attendance rate by mid-day meal programme upon qualitative dimension of education in terms of achievement of the students in different subjects. This will raise some questions such as what is the value of theories and policies formulated by the planners of metro city for the development of education in rural areas? To what extent have policies and plans solved the problem? Can it help to meet Millennium Development Goal 2015 or Vision 2020? Has there been an accompanying progress in indicators of educational outcomes? Are the

policy planners formulating quality education policy? Keeping these questions in view, the study has prepared the following objectives. The general objective of the study is to give proper importance to qualitative education in the schools. The specific objectives of the study are:

Objectives

To examine the status of states on elementary education, based on different subjects of the rural schools in India.

To assess the level of quality education by the students, based on their achievement test on different subjects.

To suggest some measures for improving the quality of education at elementary levels in different states of India.

Methodology

The Data and Sample

The study has used Annual Status of Education Report (Rural) (ASER), collected by PRATHAM in 2010[1]. The Annual Status of Education Report (Rural) (ASER) has collected the data from the sample students enrolled from Class-I to Class-VIII in each district of the rural areas in India. The Probability Proportional to Size Sampling (PPS) has been used for selection of villages[2]. The village has been randomly selected using the village directory of the 2001 Census. Finally, the data has been collected by selecting 30 villages per district and 20 rural households per village, with total 600 households per district from every state of India. In this way the study has collected the data from 26 states and three union territories of India. The students enrolled from Class - I to Class - VIII have been included in the survey to measure their performance in different subjects. The survey asked questions related to recognizing letters, reading words and sentences in one's own regional language, recognizing numbers, solving the problem of subtraction and division by the students enrolled from Class - I to Class - VIII in rural areas of India. The survey also tests the achievement of students, especially those enrolled in Classes V to VIII, in solving problems related to money tasks, recognizing the calendar, calculating area and estimating volume, through observing the figures.

[1] PRATHAM is the largest non-governmental organisation working to provide quality education to the underprivileged children of India.

[2] Proportional to Size Sampling (PPS) is a widely used standard sampling technique and is the appropriate technique to use when the sampling units are of different sizes. Here, as the sampling units are the villages, this method, thus, allows villages with larger populations to have a higher chance of being selected in the sample.

Exploring state-wise educational achievement factors using Principal Component Analysis (PCA)

In order to measure the status of elementary education in rural area, we have applied principal component technique in the data collected by PRATHAM in 2010. The Principal Component Analysis is the data reduction technique that can be used for a large number of variables having correlation with each other. If the variables correlated with each other, then they would measure a single dimension. The Principal Component Analysis technique extracts maximum variance between the variables and generates uncorrelated factors through component loadings. These standardized factors would use as a proxy instead of original large variable as the factors are now uncorrelated with each other. The present article used state-wise educational achievement factors as the proxy for measuring the status of elementary education instead of original correlated 14 variables collected by ASER 2010 reports (Manly, 2005; Landu & Everitt, 2004). As the original variables are highly correlated with each other, which would provide the biased results in achievement of education in different subjects, using of PCA, therefore, would reduce the 14 variables into few factors and these factors would become uncorrelated with each other. The principal component analysis (PCA) method helps us to determine how information from various indicators can most effectively be combined to measure an educational achievement by the students in an uncorrelated way (Vyas, 2006).

Using Principal Component Analysis (PCA), the present study collected achievement performances of students in different subjects on percentage basis for different states published in the reports. Hence, all variables take, on an average, the percentage of student's achievement in different subject tests from different states of India. In this way, the study calculated student's performance for 18 variables in percentage terms for 26 states and three union territories. The end results of principal component analysis (PCA) is the creation of a single index of different factors that assigns to each state a specific value, called a standardized score[3], representing the state's position on status of educational achievement (Manly, 2005). The four variables, e.g. Item- 1, 5, 6 and 10 in Table-2, were excluded from the analysis as they have insignificant correlation with the other variables. In this way, the study discovered four factors from original 14 variables based on the application of principle component analysis. The standardized regression score of four factors for different states has been further used to measure the status of education in the rural area. In other words, the state with negative factor score is considered as low in educational achievement and the state with positive factor score is considered as high in educational achievement (Sun et.al, 2009, Vyas & Kumaranayake, 2006; Amaza et.al, 2009). Thus, the educational achievement performance (EAP) of different states can be measured as:

1) Low educational achievement of rural students if standardized regression score of each factor for the state is less than zero (factor score <0).
2) High educational achievement of rural students if standardized regression score of each factor for the state is more than zero (factor score >0).

[3] Using PCA in SPSS-17 software, we have selected regression method to generate 4 factors representing the standardized regression score for different states, with 0 mean and standard deviation 1.

Results and Findings

The Table 1 shows the average educational status of students enrolled in Std- I to VIII classes of different schools in percentage terms. The Annual Survey Education Report (ASER) 2010 shows that only 96.5% of children in the age of 6 to 14 groups are enrolled in schools. The percentage of five year olds enrolled in school has increased from 54.6% in 2009 to 62.8% in 2010. There are 75.7% of children in the age of three to four years enrolled in pre-schools or anganwadis. Similarly, there is a reduction in the drop-out rate among girls in the age group 11 to 14 years from 10.3% in 2006 to 5.9% in 2010. The private school enrolment for rural children in the age group 6 to 14 has increased from 21.8% in 2009 to 24.3% in 2010. However, 71.1% of the children in the age group of 6-14 years are enrolled in the government schools. Further, as against 24.2% of students from Classes I to VIII in government schools attending paid tuition class, 22.8% of the students from these classes in private schools attend paid tuition classes. It is about 26.3% of students from class - IV to VIII who attend paid tuition classes. The percentage of students in Classes IV to VIII attending tuition peaks at more than 40% in states like Odisha, West Bengal, Bihar, Kerala etc.. Some states like Bihar, West Bengal and Odisha, have very low private school enrolment but high proportion of children enrolled in government schools who also take tuition classes. The incidence of tuition in Karnataka, Maharashtra, Rajasthan, Himachal Pradesh and Chhattisgarh are very low with less than 10% of students attending paid tuition classes. The average school attendance is 73.5% at elementary levels in the rural areas. The states like Bihar had less than 60% of enrolled children attending school on the day of the visit in comparison to the average attendance of 90% for southern states. Incidentally, in about 53.1% of schools, Std-II class is sitting with another class and similarly in 40.4% of schools, Std. IV is sitting with another class. The average attendance of the teacher is 86.9% for the classes at the elementary levels.

TABLE 1

Average educational status at elementary levels from Std-I to Std-VIII in Percentage

Item	*Variables*	*%*
1	Child in the 6 to 14 age group in rural India enrolled in school	96.5
2	Five-year old children enrolled in school	62.8
3	Children at age 3 enrolled in anganwadi	75.7
4	Drop-out of school girls in the age group 11 to 14	5.9
5	Children at age 6-14 enrolled in private school	24.3
6	Children at age 6-14 enrolled in government school	71.1
7	Students of government schools going to tuition class Std 1- VIII	24.2
8	Students of private schools going to tuition class Std 1- VIII	22.8
9	Students of Std IV – VIII attending paid tuition classes	26.3
10	Enrolled children attending Std I – VIII	73.5
11	Schools in which Std-II class sitting with another class (Multi-grade classes)	53.1
12	Schools where Std- IV class sitting with another class (Multi-grade classes)	40.4
13	Average Teachers attending Std I – VIII	86.9

Source: ASER 2010

The Table 2 shows the average achievement performance of the students enrolled in Class I to VIII based on testing of their own regional language, mathematics and every day calculation related to money, calendar, area and estimation on volumes in percentage terms, at the all-India level. The subject-wise achievement performance of the report shows that an average of 8.3% students enrolled in Std. I-VIII in the rural areas cannot read their own regional language at elementary levels. On the other hand, there are 15.9% of students who can read letters in their own language while 16.8% of students can read words in their own language. Besides, 18.2% and 40.9% of students can read Std. I and Std. II textbooks respectively in their own language. In the case of arithmetic test, while 8.2% of students cannot do anything in arithmetic, there are 17.2% of students in rural areas who can recognize 1 to 9 numbers, with 22.4% of students able to recognize 11 to 99 numbers. Further, 23.7% of students can subtract and 28.6% can divide numbers at elementary levels.

TABLE 2

Average achievement performance of students enrolled in Std. I to Std. VIII on different subjects in Percentage

Item	*Own Regional Language Test*	*%*
1.	Students cannot even read letter in own regional language*	8.3
2.	Students can read letter but no more in own language	15.9
3.	Students can read word in own language	16.8
4.	Students can read standard 1 text in own language	18.2
5.	Students can read standard 2 text in own language*	40.9
	Arithmetic Test	
6.	Students cannot do anything in arithmetic*	8.2
7.	Students can recognize 1 to 9 number in arithmetic	17.2
8.	Students can recognize 11 to 99 numbers in arithmetic	22.4
9.	Students can subtract in arithmetic	23.7
10.	Students can divide the numbers in arithmetic*	28.6
	Students in Std 5 and above were assessed on simple application based everyday task problems	
11.	Students answering both questions correctly related to money task	63.7
12.	Students answering both questions correctly related to find dates in a calendar	50.9
13.	Students answering both questions correctly related to calculate the area of a field	38.1
14.	Students answering both questions correctly related to estimate the volume of given figure	46.5
15.	Students of (Std I-II) who can read letters or more	76.6
16.	Students of (Std I-II) who can recognize number 1 to 9 or more	76.6
17.	Students of (Std III-V) who can read (Std 1 Text) or more	64
18.	Students of (Std III-V) who can do subtraction or more	54.9

Source: ASER 2010 *variables not included in PCA due to lack of correlation

In respect of everyday calculation test, an average 63.7% of students enrolled in Std. V and higher classes are able to answer questions related to money tasks while 50.9% of the students are able to correctly find dates in the calendar. Only 38.1% of students are able to correctly solve the task related to area while 46.5% of students correctly estimated the volume of the given figure. On the other hand, only 76.6% of students enrolled in Class I to II in rural areas can read letter or more and recognize number 1 to 9 or more. Similarly, there are 64% of students of Class III to V who can read Class - I textbook or more and 54.9% who can do subtraction or more in the rural area schools. Nationally, there is not much change in reading levels as compared to last year. Only 53.4% of children enrolled in Class-5 can read a Class - II level textbook. This suggests that even after five years in school, close to half of all children are not even at the level expected of them after two years in school.

Status of states in educational achievements

The result of principal component analysis on original 14 variables used in this paper is explained in following tables and figures.

TABLE 3

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.596
Bartlett's Test of Sphericity	Approx. Chi-Square	414.935
	Df	91
	Sig.	.000

Source: Authors own calculation

The Table 3 shows KMO statistics. The KMO statistics represents the ratio of the squared correlation between variables to the squared partial correlation between variables. The KMO test tells one whether enough items are predicted by each component. A value close to 1 indicates that patterns of correlations are relatively compact and so component analysis should yield distinct and reliable factors. In this study, 0.596 KMO sample adequacy shows that there are sufficient items for each factor. The Bartlett test is also highly significant and indicates that the variables are correlated highly enough to provide a reasonable basis for use of principle component analysis (Hair, 2007).

TABLE 4

Latent Factors with Percentage of Variance Explained (Varimax Rotation)

Factors/ Components	*Eigen Value*	*% Variance Explained*	*% Cumulative Variance*
Everyday calculation achievements	3.571	25.50	25.50
Higher class achievements	3.344	23.88	49.39
Language and math achievements	2.806	20.04	69.43
Language and number achievements	2.351	16.79	86.22

Source: Authors own calculation

The next step in the process is to decide about the number of factors to be derived. The rule of thumb is applied to choose the number of factors for which 'Eigen values' greater than one is taken by using Principal Component Analysis method[4]. By performing factor analysis with 14 variables, the study found four factors or components based on the Eigen value criteria. The Eigen values (sum of squared factor loadings) indicates the relative importance of each factor in accounting for the variance associated with the set of variables. The four latent factors/components, which have Eigen value more than unity, alone are taken for consideration. Each component factor includes some statements which are otherwise called variables. Each variable represents the level of educational achievement perception of the students regarding studying in the schools situated in rural area. The four latent factors represent around 86% of total variance, which is very significant, and the remaining variance is explained by other factors. The first factor, named as everyday calculation achievements, accounts for 25.50% of total variance; while the second factor of higher class test achievement accounts for 23.88% of variance, with the other two factors accounting for the remaining 37% of variance.

TABLE 5

Components loading of Principal component analysis

Variables of Educational achievement performances in Rural area	*Component*				*Commonality*
	1	*2*	*3*	*4*	
1. Students of Std V-VIII answering questions correctly related to calculate the area of a field	.933				.927
2. Students of Std V-VIII answering questions correctly related to find dates in a calendar	.927				.964
3. Students answering both questions correctly related to money task	.859				.794
4. Students of Std. V-VIII answering questions correctly related to estimate the volume of given figure	.847				.806
5. Students of Std I-II who can read letters or more		.964			.933
6. Students of Std I-II who can recognize numbers 1 to 9 or more		.958			.919
7. Students of Std III-V who can do subtraction or more		.797			.795
8. Students of Std III-V who can read Std 1 Text or more		.777			.833
9. Students of Std I-VIII can read word in own language			.892		.873
10. Students of Std I-VIII can recognize 11 to 99 numbers in arithmetic			.878		.789
11. Students of Std I-VIII who can read Std 1 text in own language			.796		.832
12. Students of Std I-VIII who can subtract in arithmetic			.717		..837
13. Students of Std I-VIII who can read letter in own language				.938	.907
14. Students who can recognize 1 to 9 number in arithmetic				.897	.872

Source: Authors own calculation

[4] Eigen values measure the amount of variation in the total sample accounted for by each factor. A factor's Eigen value may be computed as the sum of its squared factor loadings for all the variables.

The list of four component factors, along with their labels and variables (statements along with loading) included under these factors, are given in Table-5. The component matrix, so formed, is further rotated orthogonally using varimax rotation algorithm. These loadings, resulting from orthogonal rotation, represent the correlation among the variables and the factors to which the variables belong. However, the variables are completely uncorrelated among different factors or components. The higher the loading of the variables on the factors represents that the factors extract the common variance from the variable in comparison to the other factor. In this Table, component loading by variables in factors below .50 are ignored, as they do not well represent the factors (Leech et.al. 2005). The variables are sorted based on the high loading of the variable to fit in the factors and named the factors conceptually. The first factor has loading on the variables (Item-1 to 4) related to everyday calculation of Students enrolled from Class V to VIII. It can be named as "everyday calculation achievements". The everyday calculation achievements pertain to four variables related to students answering questions related to calculating area of field with loading of .933, finding dates on a calendar, with loading of .927, calculating money task, with loading .859 and estimating the volume of figure (.847). The second factor of loading consists of the variables (Item-5 to 8) related to performance of students enrolled in higher class on different tests, and named as "higher class achievements". All variables in this factor indicate the achievements' performance of the students studying in the higher class like Std- III to V on the lower class test. It comprises the variables like students studying in Std- I to II can read letters (.964), can recognize numbers (.958) and Students enrolled in Std-III to V can subtract (.797) and read Std– I textbook with loading (.777).

The third factor consists of the variables (Items 9 to 12) related to the performance of students enrolled in Std. I to VIII on knowledge about language and math. This factor can be named as "language and math achievement". This factor shows the variables like students can read word in own language, with loading .892, can recognize numbers 11 to 99, with loading .878, can read Std- I textbook in own language (.796) and can do subtraction, with loading .717. The fourth factor comprises the two variables (Items 13 and 14) related to performance of students in language and number achievements. This factor can be named as "language and number achievements". The commonalities section presents the commonality of each variable (i.e. the proportion of variance in each variable accounted for by the common factors). The commonality less than 0.50 are not having sufficient explanation and are excluded from the factors (Hair et al 2007). In our study, all variables are greater than 0.50, and specify that at least one-half of the variance of each variable has been taken into account. In this way, the 14 variables are reduced to four components by extracting their variance which makes them uncorrelated. The four variables are not included in PCA due to poor correlation with the other variables.

State-wise performance on education through Principal Component Analysis

The state- wise performance of education in rural area on four factors can be measured by the standardized regression score for different states generated from component analysis. The higher the score, the better the status of the state in education for different factors. The factor score less than zero for the state is considered as low in educational

achievements by the students. Likewise, the factor scores greater than zero for the state is considered as high in educational achievements by the students.

State-wise Performance of Students in Everyday Achievement Test (Factor – 1)

Table 6 shows performance of students in every day achievements (Factor-1) with reference to different states of India. The score represents the standardized regression score of different states generated from component analysis on first factor (every day achievements). The Table is divided into two sections, taking "0" as the central point. The standardized regression score for a state below "0" represents weak performance of students in everyday calculation achievements and above "0" represents good in everyday calculation achievements.

Section-1: It consists of the states, which obtained standardized scores above 0, representing good performance of students in everyday calculation achievements (Factors-1). Different states for example Manipur, Haryana, Bihar, Odisha, Jharkhand, Kerala, Goa, Tamil Nadu, Meghalaya, Sikkim and Daman and Diu are included in this category. More proportion of students enrolled in Class V to Class VIII belonging to rural area shows good performance in every day calculation (i.e. counting money, recognize calendar, calculate area and estimate volume of figure) as against states in Section- 2.

TABLE 6

State-wise Everyday Calculation Achievement Score (Factor-1)

Section-1		*Section-2*	
State	*Score*	*State*	*Score*
Manipur	2.12	Karnataka	-0.02
Haryana	1.93	Uttar Pradesh	-0.03
Goa	1.86	Andhra Pradesh	-0.06
Bihar	1.36	Himachal Pradesh	-0.15
Sikkim	0.98	Mizoram	-0.2
Daman & Diu	0.68	Assam	-0.29
Jharkhand	0.62	Uttarakhand	-0.35
Odisha	0.57	Rajasthan	-0.4
Tamil Nadu	0.51	Chhattisgarh	-0.49
Meghalaya	0.22	Tripura	-0.51
Kerala	0.15	Gujarat	-0.91
Nagaland	0.06	Dadra and Nagar Haveli	-0.96
		Punjab	-1.12
		Maharashtra	-1.13
		Arunachal Pradesh	-1.2
		West Bengal	-1.58
		Puducherry	-1.62

Source: Authors own calculation

Section-2: This section contains the states that obtained standardized regression scores below 0 indicating weak performance of students in everyday calculation achievements (Factors-1). For example, students enrolled in Class- V to Class-VIII belonging to states like Maharashtra, Punjab, West Bengal, Puducherry, Rajasthan, Gujarat, Assam, Tripura, Himachal Pradesh, Uttar Pradesh, Karnataka, Chhattisgarh, Andhra Pradesh, Arunachal Pradesh and Uttarakhand are weak in different variables included in Factor-1. In other words, the students in above mentioned states are weak in everyday calculation related to money, recognizing calendar, calculating area and estimating volume of figure as compared to states in Section 1.

State-wise Performance of Students in Higher Class Achievement (Factor – 2)

The performance of students in higher class achievements (Factor -2) with reference to different states has been shown in Table-7. The Table is divided into two sections, taking "0" as the central point. The standardized regression score below "0" (Section-2) represents weak performance of students in higher class achievements and above "0" (Section-1) represents good in higher everyday calculation achievements with reference to each state.

TABLE 7

State-wise Higher Class Achievement Score (Factor-2)

Section-1		*Section-2*	
State	*Score*	*State*	*Score*
Odisha	1.51	Uttar Pradesh	-1.85
Uttarakhand	1.35	Dadra & Nagar Haveli	-1.69
Punjab	1.31	Tripura	-1.46
Manipur	1.16	Sikkim	-1.45
Meghalaya	1.05	Bihar	-1.18
West Bengal	1.01	Kerala	-1.11
Karnataka	1.01	Assam	-0.96
Mizoram	0.89	Rajasthan	-0.85
Tamil Nadu	0.48	Daman & Diu	-0.55
Haryana	0.46	Himachal Pradesh	-0.49
Jharkhand	0.4	Maharashtra	-0.35
Arunachal Pradesh	0.39	Gujarat	-0.24
Puducherry	0.38	Goa	-0.1
Nagaland	0.36		
Andhra Pradesh	0.29		
Chhattisgarh	0.22		

Source: Authors own calculation

Section-1: It consists of the states, which obtained the standardized scores above "0", showing good performance in higher class achievements (Factor-2). Different states in this section include Odisha, Punjab, Uttarakhand, Karnataka, West Bengal, Meghalaya, Mizoram,

Tamil Nadu, Haryana, Arunachal Pradesh, Chhattisgarh, Andhra Pradesh, Jharkhand, Nagaland and Puducherry etc. Students enrolled in Class-I and Class-II in these states have shown better performance in reading letters and recognizing numbers from 1 to 9 as compared to states figuring in Section-2. Similarly, the students enrolled in Class-III to belonging to states in Section-1 category, are good in subtraction and can read Class- I textbook as against students enrolled in States falling under Section-2.

Section-2: Different states (viz., Uttar Pradesh, Rajasthan, Tripura, Kerala, Sikkim, Bihar, Assam, Maharashtra, Himachal Pradesh, Gujarat, Goa and Daman and Diu) included in this section represent weak in higher class test achievements (Factor-2). The students enrolled in Class-I and Class-II in these states are weak in reading letters and recognizing numbers from 1 to 9 as against their Section-1 counterparts. More students enrolled in Class-III to V in states of Section-2 are weak in subtraction and reading Class- I textbook as against their counterparts (Section-1).

State -wise performance of students in language and math Achievement (Factor – 3)

TABLE 8

State-wise Language and Math Achievement Score (Factor-3)

Section-1		*Section-2*	
State	*Score*	*State*	*Score*
Nagaland	2.09	Haryana	-1.54
Daman & Diu	1.43	Himachal Pradesh	-1.46
Karnataka	1.36	Uttarakhand	-1.33
Arunachal Pradesh	1.22	Bihar	-1.31
Tamil Nadu	1.21	Punjab	-1.21
Sikkim	1.09	Kerala	-1.04
Tripura	1.02	Puducherry	-0.75
Meghalaya	0.74	Dadra & Nagar Haveli	-0.74
Assam	0.7	Jharkhand	-0.65
Gujarat	0.54	Rajasthan	-0.42
Manipur	0.38	Goa	-0.36
Andhra Pradesh	0.16	Chhattisgarh	-0.3
		Maharashtra	-0.27
		West Bengal	-0.21
		Uttar Pradesh	-0.11
		Odisha	-0.11
		Mizoram	-0.04

Source: Authors own calculation

Table-8 shows regression scores of language and math achievements (Factor -3) with regard to different states in India. The standardized regression score below "0" (Section-2) represents weak in language and math achievements and above "0" (Section-1) represents good in language and math achievements.

Section-1: Students enrolled in states that belong to Section-1 category are more likely to have secured higher score in language and math test as against their counterparts (Section-2). The states in this section include Nagaland, Karnataka, Tamil Nadu, Gujarat, and North-East states. Students' performance are very good in reading words in own language, recognizing numbers from 11-99, subtraction and reading Class- I text book.

Section-2: Different states in this category represent weak in language and math achievements (Factors-3). The states in this section include Himachal Pradesh, Bihar, Kerala, Haryana, Punjab, Uttarakhand, West Bengal, Rajasthan, Jharkhand, Chhattisgarh, Maharashtra, Uttar Pradesh, Odisha, Mizoram and Goa etc.. The students of these states are weak in reading words in own regional language, recognizing numbers from 11-99 , reading Class- I text book and subtraction as compared to their section-1 counterparts.

State- wise performance of students on language and number Achievement (Factor – 4)

TABLE 9

State-wise Language and Number Achievement Score (Factor-4)

Section-1		*Section-2*	
State	*Score*	*State*	*Score*
Uttar Pradesh	2.18	Kerala	-2.01
Arunachal Pradesh	1.27	Mizoram	-1.58
Assam	1.21	Puducherry	-1.46
Jharkhand	1.13	Sikkim	-1.41
Odisha	0.97	Tripura	-1.21
Rajasthan	0.91	Himachal Pradesh	-0.89
Chhattisgarh	0.81	Maharashtra	-0.88
Bihar	0.67	Nagaland	-0.75
Karnataka	0.64	Manipur	-0.60
Uttarakhand	0.55	Andhra Pradesh	-0.27
Gujarat	0.47	Tamil Nadu	-0.20
Dadra & Nagar Haveli	0.39	Punjab	-0.14
Goa	0.1	Haryana	-0.09
West Bengal	0.06		
Meghalaya	0.01		

Source: Authors own calculation

The performance of students in language and number achievements (Factor 4), with reference to different states of India, has been shown in Table 9. It is divided into two sections based on the score.

Section-1: Different states in this section have obtained the standardized scores above "0" representing good in language and number achievements. The states in this section include Uttar Pradesh, Arunachal Pradesh, Jharkhand, Odisha, Rajasthan, Gujarat, Karnataka, Chhattisgarh, Kerala, Bihar, Assam, Uttarakhand, West Bengal, Goa and Meghalaya. Maximum students enrolled in states coming under Section-1 are efficient in reading letter

in own language and recognizing numbers from 1 to 9 number as compared to their counterparts (section-2)

Section-2: This section contains different states in which students are weak in language and number achievements (Factor-4) as compared to the counterpart section states. Higher proportion of students who are poor in reading letter in own language and recognizing numbers from 1 to 9 are those of this section enrolled in elementary levels at schools situated in rural area.

Conclusion

Thus, from the above results, we can say that status of elementary education based on the different factors are not the same for all states. Some states are very good in one factor and poor in the other factor. By considering the average score[55] of all the four factors in component analysis, the study found the level of elementary education in rural area as weak in the states like Kerala, Puducherry, Himachal Pradesh, Maharashtra, Tripura, Punjab, Mizoram, Sikkim, Rajasthan, West Bengal, Bihar and Gujarat. The average factor scores of these states are below 0 and are considered as having weak educational achievements by the students at the elementary level. However, the states like Andhra Pradesh, Uttar Pradesh, Uttarakhand, Chhattisgarh, Assam, Haryana, Goa, Jharkhand, Daman and Diu, Arunachal Pradesh, Nagaland, Tamil Nadu, Meghalaya, Odisha, Karnataka and Manipur are good in educational achievements as their average factor score remains above 0.

Thus, a suitable educational policy is required for further improvement of education in rural area for Low educational achievement states. The elementary education is the foundation of development of human, physical and natural resources. It helps to foster in each child the attributes and values of a responsible, capable, active and healthy member of the family and society. In order to improve the quality of education at the foundation stage, the rigidity of curriculum, testing and teaching methods need to be relaxed. The use of innovative methods and new models of education can be evolved and tested by the researcher, according to the needs of the students in the rural area. The experimentation is the need of the hour, with new methods for knowledge delivery. On the other hand, the quality should be cohort of each policy. The successful qualitative education policy is urgently required for the bedrock of all fields of national development in political, economic, technical, scientific, social, environmental and other spheres. It is the supply side factors like provision of infrastructure, implementation of new policy and suitable environment that will automatically improve the quality of education at bottom levels. However, while quantitative spending in education, training for teachers and providing of infrastructure is necessary, they would not, per se, be fruitful until there is an assessment of the benefit achieved from the facilities. Otherwise, this would lead to a quantitative growth of mind without an accompanying qualitative brain. Therefore, evaluation of educational programmes, over a timeframe, would help in improving quality in the classroom. This would help in creating dynamic human capital and build India from the rural areas not in dreams but in reality.

[5] The average score of each state has been calculated by dividing the sum of four factor score with 4.

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Academic Performance of Urdu and English Medium Adolescents in Relation to Intelligence, Adjustment, Socio-Economic Status and Study Habits

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Abstract

The present study explored the contribution of intelligence, adjustment, SES and study habits on the academic performance of Urdu and English medium adolescents. A sample of 684 (336 Urdu medium & 348 English medium) adolescents studying in Class 10 from 24 schools were selected by stratified random sampling technique. The study sample responded on the standardized tools. The main statistical technique used for the treatment of data is stepwise multiple regression analysis. The result revealed that intelligence is the most potential predictor of academic performance of English medium adolescents, while study habits emerged as an important contributor for the academic performance of Urdu medium adolescents.

Introduction

Education plays an important role in every aspect of human life. The basic aim of education is to produce better and fully realized individuals to enable them to become responsible citizens and active members of the society. Different philosophies have been developed to realize the aims of education by a number of schools of thought. All schools of thought assumed that education is of central importance in creating a better and fully realized individual as well as a good society. Academic performance occupies an important place in the school curriculum. It is ironic that at this juncture, schooling has not been received the attention that is warranted. This is a matter of fact that both in developed and developing countries for different reasons this problem is under fire. The present study has a significant and pragmatic value in the field of education. The main purpose in conducting this study is to take a holistic view of various factors influencing academic performance of the student at the secondary level. It is an accepted fact that the quality of education depends upon the quality of its human resources. This, in turn, depends on the quality of education imparted in educational institutions.

In this study, the investigator makes a humble endeavor to trace the contribution of intelligence, adjustment, SES and study habits on the academic performance of adolescents. The purpose of this report is to bring to the attention of the scholar community a research direction that may have potential for enhancing children's academic performance. The rationale for this study is that through better understanding of the relationship between various factors and academic performance and also the factors that hinder academic performance, educators will be able to make informed decisions on how to improve academic performance. Thus, the present study, in the view of the investigator, may help in bringing about qualitative as well as quantitative improvement in teaching learning process, which would, in turn, enhance the quality and level of educational products. It might also serve as a reference work for researchers interested in investigating the different factors influencing the academic performance of the students.

Academic performance involves complex interaction of factors that have specific direct or indirect effect through other factors on school outcome. Although the relationship between academic performance and the factors such as intelligence, adjustment, SES and study habits has been studied widely, it is important to explore the factors that could

contribute significantly to the academic performance of Urdu and English medium adolescents. This would help fill up the existing gap in the research carried out in India in this specific field. In addition, it could pave the way for more comprehensive research on the comparison of national and international research finding. Perhaps such researches can make recommendations as well as provide correct guidance for enhancing the academic performance of the adolescents. The present study is designed to look into the strength of the relationship of the above four factors in predicting academic performance. Therefore, the investigator proposes to undertake an empirical study to explore the academic performance of Urdu and English medium adolescents in relation to intelligence, adjustment, socio-economic status and study habits, as this kind of comparison is very rare and is expected to yield interesting results.

Objectives of the study were

1. To find out the predictability strength of intelligence, adjustment, socio-economic status and study habits on academic performance for the total sample.
2. To find out and compare the predictability strength of intelligence, adjustment, socio-economic status and study habits on academic performance for the Urdu medium and English medium samples.
3. To find out and compare the predictability strength of intelligence, adjustment, socio-economic status and study habits on academic performance for the male and female samples.
4. To find out and compare the predictability strength of intelligence, adjustment, socio-economic status and study habits on academic performance for the Urdu medium male and English medium male samples.
5. To find out and compare the predictability strength of intelligence, adjustment, socio-economic status and study habits on academic performance for the Urdu medium female and English medium female samples.
6. To compare the predictability strength of intelligence, adjustment, socio-economic status and study habits on academic performance for the Urdu medium male and Urdu medium female samples.
7. To compare the predictability strength of intelligence, adjustment, socio-economic status and study habits on academic performance for the English medium male and English medium female samples.

Sample of the Study

The Sample of the Study consisted of 684 adolescents studying in Class 10. Among them, there were 336 Urdu medium students (143 males and 193 females) and 348 English medium students (161 males and 187 females) from 24 schools. Samples were selected by stratified random sampling procedure in such a way that Urdu medium students, English medium students, male students and female students received equal representation. From each selected school, the sections of Class X were identified through random sampling technique. Finally, the adolescent students of Class X were taken from the selected sections by the cluster sampling technique.

Tools Used

- Intelligence Test-Culture Fair (Scale 2, Form A) by Cattell, and Cattell.
- Adjustment Inventory for School Students (AISS) by Sinha and Singh.
- Socio-Economic Status Scale (SESS) (Form A, Urban) by Srivastava.
- Test of Study Habits & Attitude (TSHA) by Mathur.

Academic Performance Scores (% of annual examination marks (Class IX) taken from the school records).

Procedure for Data Collection

After getting the letter of reference from the Head, Department of Education and Training, MANUU**,** for collection of data, the researcher sought the help of principals and teachers of the selected schools. The students were motivated to respond honestly and frankly. The respondents were assured that the data would be used only for research purpose. All the four tests, namely intelligence, adjustment, socio-economic status and study habits were administered by the investigator himself strictly as per the instructions given in the manual of the tests. Each data sheet was scrutinized for correction, if any. The data for academic performance were the percentage of marks obtained by the respondents in the annual examination (9^{th} class) noted from the office records.

Scoring of the Test and Data Processing

All the tests used for the present investigation were standardized. The scoring for the tests (intelligence, adjustment, socio-economic status and study habits) was done strictly according to guidelines and instructions provided by the author (s) in the manuals and keys of the respective tests. The collected data was processed by computer using statistical software package SPSS (Statistical Package for Social Sciences). A comprehensive data sheet was prepared, with proper coding of the dependent and independent variables in conformity with the need of the package. Thereafter, the data was fed in the software worksheet and also cross-checked to avoid any mistakes.

Statistical Technique

The main statistical technique used for the treatment of data was stepwise multiple regression analysis. However, t-test to see the significance of difference between two means, Z-test to see the difference between two percentages and Pearson product moment correlation coefficient (r) to find out inter-correlation among variables involved were also used.

Findings of the Study

In the effort to find out the significant predictors of academic performance and predictability extent of the intelligence, adjustment, socio-economic status and study habits

as significant predictive variables among the Urdu and English medium adolescents, the investigator has found out certain significant results which are given below:

Total sample

- Intelligence, adjustment, SES and study habits are found to be significant predictors of academic performance for the total sample and have the predictability strength of 62.0%.
- For the total sample, the maximum predictable variance is shared by study habits (45.7%), followed by adjustment (7.6%), SES (4.5%) and intelligence (4.2%).

Urdu medium and English medium samples

- Study habits, adjustment, SES and intelligence are found to be significant predictors of academic performance for the Urdu medium sample and have the predictability strength of 43.6%.
- For the Urdu medium sample, the maximum predictable variance is shared by study habits (34.8%), followed by adjustment (5.7%), SES (1.9%) and intelligence (1.2%).
- Adjustment, intelligence, study habits and SES are found to be significant predictors of academic performance for the English medium sample and have the predictability strength of 59.6%.
- For the English medium sample, the maximum predictable variance is shared by adjustment (27.0%), followed by intelligence (16.1%), study habits (10.1%) and SES (6.4%).
- All the four predictors are found to be common significant predictors of both the groups. Study habits are found to be playing more important role for the Urdu medium sample whereas adjustment and intelligence play more important role for the English medium counterparts.

Male and female samples

- Study habits, SES, intelligence and adjustment are found to be significant predictors of academic performance for the male sample and have the predictability strength of 61.3%.
- For the male sample, the maximum predictable variance is shared by study habits (38.6%), followed by SES (10.9%), intelligence (7.5%) and adjustment (4.3%).
- Study habits, adjustment, SES, and intelligence are found to be significant predictors of academic performance for the female sample and have the predictability strength of 61.6%.
- For the female sample, the maximum predictable variance is shared by study habits (48.2%), followed by adjustment (7.1%), SES (3.4%), and intelligence (2.9%).
- Similarly, as in the case of Urdu medium & English medium samples, all the four predictors are found to be common significant predictors for both the groups. However, only SES has played more important role for the male sample, the other three variables shared equally important roles for both the groups.

Urdu medium male and English medium male samples

- Study habits, intelligence, SES and adjustment are found to be significant predictors of academic performance for the Urdu medium male sample and have the predictability strength of 42.8%.
- For the Urdu medium male sample, the maximum of the predictable variance is shared by study habits (22.0%), followed by intelligence (10.1%), SES (6.4%), and adjustment (4.3%).
- Intelligence, SES, study habits and adjustment are found to be significant predictors of academic performance for the English medium male sample and have the predictability strength of 62.0%.
- For the English medium male sample, the maximum predictable variance is shared by intelligence (45.9%) followed by SES (9.2%), study habits (5.2%) and adjustment (1.7%).
- When the Urdu medium male and English medium male are compared to the predictability strength, only study habits for the Urdu medium male and intelligence for the English medium male sample emerge as the additional significant predictors.

Urdu medium female and English medium female samples

- Study habits and adjustment are found to be significant predictors of academic performance for the Urdu medium female sample and have the predictability strength of 44.8%.
- For the Urdu medium female sample, the maximum predictable variance is shared by study habits (42.0%), followed by adjustment (2.8%).
- Intelligence, adjustment, SES and study habits are found to be significant predictors of academic performance for the English medium female sample and have the predictability strength of 58.9%.
- For the English medium female sample, the maximum predictable variance is shared by intelligence (37.7%), followed by adjustment (13.4%), SES (4.7%) and study habits (3.1%).
- For the comparative groups, Urdu medium female and English medium female samples, the two predictors are found to be common significant predictors for both the groups. Study habits are found to be playing more important role for the Urdu medium sample whereas adjustment plays more important role for their counterparts, English medium female sample. Intelligence and SES are found to be the additional significant predictors only for English medium female sample.

Urdu medium male and Urdu medium female samples

- Among the two common significant predictors of the groups under comparison, only study habits is found to be playing more important role for Urdu medium female sample. The other two predictors, intelligence and SES are found to be the additional significant predictors for Urdu medium male sample.

English medium male and English medium female samples

- For the two groups compared here, all the four predictors are found to be common significant predictors for both the groups. However, only adjustment emerges as the important predictor for the English medium female sample, with all the other three being equally important for both the groups.

Educational Implications

Academic performance becomes a matter of great concern in our present system of education. There are various factors, which influence the academic performance but intelligence, adjustment, socio-economic status and study habits affect it the most. The study reveals that intelligence is the most potential predictor of academic performance of the English medium adolescents, while study habits play key role in affecting the academic performance of Urdu medium adolescents. In English medium schools, the students get opportunities to utilize their mental potential to the optimum extent due to the availability of necessary facilities in terms of good teachers, conducive environment, information sources, special parental care, tutors and so on and so forth. All these elements help the child to perform well in academic activities but we hardly find any of these at Urdu medium schools for the students to pursue their school education without any difficulties. In comparison with the parents of English medium students, parents of the Urdu medium students fail to provide proper care and facilities to their wards due to many reasons. All these factors hamper the academic performance of the students studying in Urdu medium schools. While in the context of English medium adolescents, various components help in the development of their intelligence which ultimately have a positive effect on their academic performance, Urdu medium adolescents, on the other hand, have inadequate educational facilities resulting in negative influence on their academic performance. Therefore, there is an urgent need to introduce Guidance and Counseling Centers in each and every school, particularly in Urdu medium schools, to enable the Urdu medium adolescents perform well, academically. The above findings reveal that intelligence and study habits play a key role in influencing the academic performance of adolescents. Therefore, it is the duty of parents and teachers to provide all necessary facilities to students in terms of congenial environment at home and school, right selection of course books, proper parental care, information sources etc.. All these aspects are very helpful in optimizing adolescents' intellectual potential, on the one hand, and in developing good study habits, on the other. As such, this gap between English and Urdu medium adolescents should be bridged effectively without any delay. The study has also revealed that students belonging to the lower socio- economic status groups lagged behind in academic performance in comparison to those of high socio-economic status. Therefore, these students need special attention from the government of India, particularly from the Ministry of Human Resources Development. The ministry should offer scholarships to enable them to continue their education without any financial difficulties. Precisely, it is a supportive measure on behalf of the Government for students who are bright but are unable to succeed in the schools due to their low SES. In order to help school children develop their intelligence, and facilitate their adjustment to various situations as also inculcate in them good study habits, family members, schools and the society, as a whole, should work relentlessly to create a better academic environment in order to bring about a balance

between English medium and Urdu medium schools in terms of their performance. Besides, there is a crying need for revitalization of parent-teacher associations so that they could guide the learners to perform better on various academic activities and also face the knowledge-based society head- on confidently. The society is in need of values. If values are inculcated or could be imbibed, students could become torch-bearers of peace. This can materialise only when the students are instructed with empathy the readings that they should do. Probably, biographies of M. K. Gandhi, B.R. Ambedkar and Dr. A.P. J. Abdul Kalam etc. would help them understand what 'self-actualization' is, and how it could create a niche for themselves in society they live. In other words, intellectual maturity and academic performance is enhanced with the general reading filled with values and reason.

Conclusion

In the light of the statements above, it can be concluded with a reasonable degree of confidence that study habits for the Urdu medium adolescents and intelligence for the English medium adolescents are vital and they play a constructive role in improving their academic performance. The situation demands immediate attention of the parents and teachers to provide extra care, educational efforts and encouragement to better utilize their academic potential for upward movement with reference to their academic performance. Besides, this study shows that socio-economic status and adjustment have a direct bearing on the qualitative educational progress of the children. Hence, efforts should be made at all the levels of administration to extend economic support to all the learners to improve their confidence levels to pursue their studies at school level and get adjusted well for consistent academic performance.

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A Study of the Effect of Factors Affecting the Quality of Elementary Education in Urban Slums of Varanasi City

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Introduction

Education is the key to national prosperity and welfare which furnishes the individual with basic knowledge and technical skills essential for work, productivity and economic survival. The most crucial age for life-long development are popularly known as elementary education life years. In these periods, the seeds for the physical, intellectual, emotional and social life are sown. The Government of India is committed to provide free and compulsory elementary education to all children. The Right to Education Act (RTE Act, 2009) declared free and compulsory education from age 6 to 14 as a fundamental right of children. Article 21- A in Part-III (Fundamental Right) of the Constitution states: "The State shall provide free and compulsory education to all children of the age of six to fourteen years in such a manner as the State may, by law, determine".

The Governmental programmes and policies regarding elementary education in India have had considerable impact on children's access to education. The country's literacy rate had reached to 74 percent in 2011 in comparison to 18.33 percent in 1951 (census of India). The rate of literacy among scheduled caste (SCs) increased from 10.3 percent in 1961 to 54.7 percent in 2001. However, in case of scheduled tribes (STs), the growth is relatively slow, from 8.5 percent in 1961 to 47.1 percent in 2001. The enrolment ratio of general category children at the primary school level has increased from 81.6 percent to 94 percent in 2000-2001. Among the SC and ST children, the rate of enrolment has increased from 21.2 percent to 26.5 percent and from 11 percent to 15.2 percent respectively. It is significant that the growth rate among general population (excluding SC and ST) is 12.4 percent whereas that of the SCs is 5.3 percent and the STs is 4.2 percent. The drop-out rate in the last decade has considerably declined. In 2009-2010, it was 28.86 percent at the primary school level. The National Sample Survey of India showed that only 68% of non-notified slums have a primary school within a radius of 1 kilometre in 2002(Government of India, 2003). Also, in slum areas, all the children do not take admission in the schools (Jha & Jingran, 2005; Rathor, 2003). A number of studies, conducted by V.V. Giri National Labour Institute, reported that a considerable number of deprived children were working in hazardous industries like brass industry (Sekar, 2007), brick industry (Ghosh, 2004), diamond industries (Desai & Raj, 2001) etc.. Children were put to work in these industries mostly because they have been either school drop-outs or have never been sent to schools at all. The overall picture of education in India implies that educational opportunities for the urban deprived are much lower than for the affluent section of the population.

Family and schools play foremost role in the development of a child. A considerable number of studies have revealed positive association of family background characteristics such as parental socio-economic status (Chopra, 1964; Mathur, 1963; Neff, 1938; White et al., 1993), home environment (Marjoribanks, 1972; Bradley, 1985; Burns & Homel, 1985), and demographic factors such as gender and race (Hedges & Nowell, 1999) with pupils' academic achievement. Studies conducted by Coleman et al. (1966) and Mosteller and Moynihan (1972) highlighted the importance of family background characteristics such as parental socio-economic status over school characteristics in explaining the variation in student's achievement. However, Ahmad (1993), Benson (1965), Kartzman and Martin (1968), Mollenkopf and Melville (1956) and Todd and Kuhlthau (2005) found significant relationship between school resources and pupil performance. In other studies, teacher's efficiency variables such as teachers' reading and writing skills (Ferguson, 1996; Strauss &

Sawyer, 1996), teacher's verbal aptitude (Ehrenberg & Brewer, 1994), and learner- centered approach in teaching (Capraro, 2001; Robinson & Sink, 2002; Smith, 1999 and Ziegler & Yan, 2001) were found to have considerable effect on students' academic achievement. Physical-natural environment of classroom was also found significant in students' learning outcomes (Phillips, 1997; Dunn et al., 1985). The social composition of students in a school has also been found to influence students' academic achievement. Bryk & Raudenbush (1988) and Lee & Bryk (1989) found that school composition measured as percent of minority or disadvantaged students in the school is negatively associated with achievement and, thus, accounts for a substantial amount of variability in achievement. Chandra Shekharaiah (1969), Chopra, 1964, Dave (1963), Shah, and Sharma (1984) have shown that academic achievement of children belonging to deprived categories was considerably different from the academic achievement of children belonging to privileged categories.

Varanasi is a major religious, cultural and educational centre of India. The total population of Varanasi's urban agglomeration is 1.2 million; whereas the city's population is about 1.09 million. Varanasi has 227 slums spread all over the city, both on government and private lands (Measurement Learning and Evaluation [MLE]: Baseline Report for Varanasi City, 2011). The total population in the slums is approximately 457,613, which is about 38 percent of the total population. The deprived and exploited children in Varanasi slums are involved in silk and carpet industries. There are more than 200,000 children under the age of 14 in these industries. Although significant efforts have been made by government, non-government and private sectors, quality education is still not within the access of the deprived children of Varanasi slums areas.

Despite a large number of studies on education in India, education related to children in urban slum areas has not been adequately researched and attention in education research has not been paid to the high level of disparities within the urban sector. There is lack of analytical studies regarding effect of school and home environmental factors on learning outcomes specially oriented to deprived children of slum areas at their elementary stage of education. The present study has been conducted to determine the effect of school and home factors on learning outcomes of children of urban slums areas. The investigator also compared learning outcomes of children of urban slums with National Norms.

Objectives of the Study

The present study was conducted to achieve following objectives:

1. To develop tools for assessing the school and home factors affecting the quality of elementary education in urban slums of Varanasi city.
2. To identify the effect of school factors in the quality of elementary education in urban slums of Varanasi city.
3. To identify the effect of home factors in the quality of elementary education in urban slums of Varanasi city.
4. To compare the quality of elementary education in government elementary schools with the quality of private elementary schools in urban slums of Varanasi city.
5. To compare the quality of elementary education in urban slums of Varanasi city with quality of elementary education at the national level.

Hypotheses for the Study

To test the above objectives, the following null hypotheses have been framed and tested at .05 level of significance:

- School factors do not significantly affect the quality of elementary education in urban slums of Varanasi city.

Sub-Hypotheses

- Basic facilities available in the schools do not significantly affect the quality of elementary education in urban slums of Varanasi city.
- Teaching-learning materials available in schools do not significantly affect the quality of elementary education in urban slums of Varanasi city.
- Physical-natural environment of classroom does not significantly affect the quality of elementary education in urban slums of Varanasi city.
- School-community co-operation does not significantly affect the quality of elementary education in urban slums of Varanasi city.
- Co-curricular activities organized in schools do not significantly affect the quality of elementary education in urban slums of Varanasi city.
- Instructional method adopted by the teacher in curriculum transaction does not significantly affect the quality of elementary education in urban slums of Varanasi city.
- Teacher's behavior during instruction does not significantly affect the quality of elementary education in urban slums of Varanasi city.
- Teacher's qualification does not significantly affect the quality of elementary education in urban slums of Varanasi city.
- Teacher's interest and satisfaction in teaching profession does not significantly affect the quality of elementary education in urban slums of Varanasi city.
- Evaluation procedure does not significantly affect the quality of elementary education in urban slums of Varanasi city.
- Maintenance of school records and supervision does not significantly affect the quality of elementary education in urban slums of Varanasi city.
- Home environment does not significantly affect the quality of elementary education in urban slums of Varanasi city.

Sub-Hypotheses

- Socio-economic status does not significantly affect the quality of elementary education in urban slums of Varanasi city.
- Home teaching-learning environment does not significantly affect the quality of elementary education in urban slums of Varanasi city.

- There is no significant difference in the quality of elementary education of government elementary schools and that of private elementary schools in urban slums of Varanasi city.
- There is no significant difference in the quality of elementary education in urban slums of Varanasi city and quality of elementary education at the national level.

Methodology

Sample

Multi-stage stratified random sampling technique was used for selection of the sample of study. Varanasi city is divided into nine educational wards. From slum areas of these educational wards, 62 elementary schools (29 governments and 33 private) were randomly selected. For the purpose of collecting information regarding school, classroom and home environment variables, and for assessing learning outcomes of students, the headmaster of school, one teacher teaching in class-V, and 10 students of class-V, were randomly selected from each elementary school. Thus, the sample of the study consisted of 62 elementary schools (29 government and 33 private), 62 headmasters/principals (29 government schools' headmasters and 33 private schools' principals), 62 teachers, teaching in class V, 62 classes of standard V, and 620 students of class-V.

Tools

The following tools were used to collect the data:

(i) School questionnaire developed by the investigator
(ii) Teacher questionnaire developed by the investigator
(iii) Home environment questionnaire developed by the investigator
(iv) Classroom observation form developed by the investigator
(v) Competency-based Mathematics and Language (Hindi) test developed by the Department of Educational Measurement and Evaluation, NCERT (2006).

In order to ensure the trustworthiness of the tool, pilot study has been conducted and content validity was examined. The reliability coefficient of questionnaires-school questionnaire, teacher questionnaire, home environment questionnaire, examined through test-retest method, were found .73, .69 and .64 respectively. The inter-observer reliability of classroom observation form was established by employing Cohen's Kappa coefficient, which was found to be .69.

Data Analysis

Keeping in view the objectives and hypotheses of the study, the data was analyzed using multiple linear regression analysis, scattered diagram, percentage, grouped-bar-diagrams and Mann Whitney 'U' test. Multiple regression analysis was employed considering quality score, which was operationally defined as students' learning outcomes, as dependent variable and thirteen school and home factors as independent variables. Also for identifying the effect of each school and home factors individually on the quality of elementary

education, scattered diagrams, with best fit line, were plotted. Mann Whitney 'U' Test was used for examining the significance of difference in quality of elementary education of government elementary schools with that of private elementary schools.

Finding of the Study

The findings of the present study are as follows:

Effect of School and Home Factors on the Quality of Elementary Education

- The effect of basic facilities available in the schools on the quality of elementary education was found significant at .05 level of confidence. Further, it was found that basic facilities were contributing 15.4 percent in quality of elementary education in urban slums of Varanasi city.
- The effect of teaching-learning material exerted in quality determination, was found not significant at 0.05 level of confidence. Further, teaching-learning material available in schools was inhibiting 5.1 percent the quality of elementary education.
- The effect of physical-natural environment of classroom was found significant at .05 level of confidence. Further, its contribution was found 13 percent in quality of elementary education in urban slums of Varanasi city.
- The effect of school-community cooperation factor was found not significant at 0.05 level of confidence. Further, it's not significant contribution was 0.7 percent in quality of elementary education.
- The effect of co-curricular activities organized in school was found not significant at 0.05 level of confidence. Further, it's not significant contribution in quality score was found 4.9 percent.
- The effect of instructional method used in curriculum transaction was found significant at .05 level of confidence. Further, its contribution was found 19.7 percent in quality of elementary education in urban slums of Varanasi city.
- The effect of teacher's behavior in classroom in order to accelerate learning among students was found significant at 0.05 level of confidence. Further, its contribution was found 11.4 percent in quality of elementary education.
- The effect of teacher's qualification exerted in quality determination was found not significant at 0.05 level of confidence. Further, it was found that teacher's qualification inhibiting 0.1 percent the quality of elementary education in urban slums of Varanasi city.
- The effect of teacher's interest and satisfaction was found not significant at .05 level of confidence. Further, its contribution was found just 0.9 percent in quality determination.
- The effect of evaluation procedure adopted in school was found not significant at .05 level of confidence. Further, its contribution was found 2.1 percent in quality determination.
- The effect of school record and supervision exerted in quality determination was found not significant at 0.05 level of confidence. Further, it was found inhibiting 3.4 percent the quality of elementary education.

- The effect of socio-economic status (SES) on quality of elementary education was found significant at .05 level of confidence. Further, it was found contributing 13.7 percent in the quality of elementary education in slum area of Varanasi city.
- The effect of home teaching learning environment was found not significant at .05 level of confidence. Further, it was found contributing just 0.3 percent in the quality of elementary education.

Multiple correlation coefficient R, R2 and index of forecasting efficiency for school and home factors

- The multiple correlation coefficient R between quality score and thirteen school and home factors was found significant at .01 level with dfs= 47, 14.
- All the thirteen school and home factors contribute 73.5 percent in quality of elementary education in urban slums of Varanasi city.
- The index of forecasting efficiency for thirteen school and home factors was found to be very high i.e. 48.5, indicating that prediction of quality of elementary education through school and home factors, by means of regression equation, is 48.5 percent better than those made merely from a knowledge of the means of quality scores.
- Eleven school factors were found contributing 59.5 percent in the quality of elementary education in urban slums of Varanasi city.
- Index of forecasting efficiency for eleven school factors was found to be 0.364, indicating that prediction of quality of elementary education through eleven school factors, by means of regression equation, is 36.4 percent better than those made merely from a knowledge of the means of quality scores.
- Two home factors contribute 14.0 percent in the quality of elementary education in urban slums of Varanasi city.
- Index of forecasting efficiency for two home factors was found 0.073, indicating that prediction of quality of elementary education through two home factors, by means of regression equation, is 7.3 percent better than those made merely from knowledge of the means of quality scores.

Equation of regression line

Regression equation between quality of elementary education as dependent variable and 13 school and home factors as independent variables are as under:

$$QS=1.392+.254X_1-.166X_2+.973X_3+.123X_4+.248X_5+.627X_6+1.249X_7-.006X_8+.124X_9+.184X_{10}-.253X_{11}+.686X_{12}+.021X_{13}$$

Difference in the Quality of Government Elementary Schools with that of Private Elementary Schools in Urban Slums of Varanasi City

- In mastery grade (80-100), not a single child was found in both the government and private elementary schools.
- In excellent grade (60-79), only 8.788 percent children were found in private schools and not a single child in government schools could achieve this grade.

- In good grade (50-59), the percentage of children in government schools and private schools were 11.698 and 16.970 percent respectively.
- In average grade (40-49), the percentage of children in government schools and private schools were found to be 14.717 and 22.121 percent respectively.
- In minimum grade range (35-39), the percentage of students in government schools and private schools were found to be 10.189 and 13.030 respectively.
- Among elementary school children in slum of Varanasi city, 63.369 percent children in government schools and 39.091 percent in private schools were found in not functional grade (0-34).
- Mean quality score of private schools was found to be significantly higher than that of government schools.

Difference between the quality of elementary education in urban slums of Varanasi city and quality of elementary education at national level

- In the quality score range of (0-49), the percentage of students at national level, government school level, and private school level were found 44.5, 88.275 and 74.242 percent respectively.
- In the quality score range (50-59), the percentage of students at national level, government school level and private school level were found 16.12, 11.70 and 16.97 percent respectively.
- At the higher quality score range (60-100), the percentage of students at national level, government school level and private school level were found 39.38,0 and 8.788 percent respectively.
- Average quality score of elementary education at national level was found to be higher than that of elementary education in urban slums of Varanasi city.

Conclusion

From the findings of the study, it may be concluded that five school and home factors such as instructional method adopted by teacher in curriculum transaction, basic facilities available in the schools, teacher's behavior in classroom, physical-natural environment of the classroom and parental SES were vital factors in determining the quality of elementary education in urban slums of Varanasi city. In these factors, instructional method adopted by teachers in curriculum transaction has made maximum contribution in quality determination. Second largest contribution was made by basic facilities available in the schools. Parental SES and physical-natural environment of classroom have made almost equal contribution in quality of elementary education. However, remaining school and home factors did not considerably influence the quality of elementary education. The major reasons for this are insufficient school facilities in students' access, ineffective classroom instruction, rarely organizing co-curricular activities and parent-teacher's meetings in schools, and lack of awareness in the slum community. Most of the teachers of government and private elementary schools were teaching on contractual basis at very low fixed remuneration. Uncertainty of job, working place in squalor area, low status of elementary school teachers are, perhaps, the reasons for people not taking interest and dissatisfaction in

teaching profession. It seems that teaching-learning material is not being properly used by the teachers. Most of the schools have teaching-learning materials only for record purposes. Teachers are also not properly trained in using these materials as well as they have not clear concept about its use.

From the findings of the study, it may also be concluded that the quality of private elementary schools was better than that of government elementary schools in slum areas of Varanasi city. Quality of elementary education provided at national level was also better than that of deprived section in slum areas of Varanasi city. In slum areas of Varanasi city, supervision in private schools seems to be comparatively better than supervision in government schools. Besides this, in slum areas, teachers were using traditional method of teaching in curriculum transaction. Most of the teachers were unfamiliar with innovative learner-centered methods. Also teachers' behavior during instruction was not found efficient in accelerating learning among students. In these schools, students were not given the opportunity to ask questions, express ideas, and participate in open discussion during instruction. It seems that, in slum elementary schools, students did not have access to sufficient basic facility in schools, qualified teachers having interest in teaching profession, conducive physical-natural environment and teaching-learning materials. Conclusively, the school and home circumstances in these regards in slum areas are not favourable. These are the possible reasons of low learning outcomes of children, in particular, and quality of elementary education in slum areas of Varanasi city, in general.

Educational implications of the study

The present study will enrich the existing stock of knowledge in the field of elementary education, especially in elevating learning outcomes of deprived children. Further, the study will serve the purpose of academicians, professionals, researchers, administrators, economists and planners concerned with elementary education. Consequently, it would also provide opportunity to the researchers to disseminate their knowledge and experience worldwide. As far as the applicability and usefulness of the study is concerned, the following are the thrust areas where the study may be helpful:

- The study may be beneficial for making policy decisions and formulating special programmes for achieving the goal of universalisation of quality elementary education.
- The study may be beneficial for teachers, headmasters, and parents for improving learning outcomes of deprived children in the society.
- The study reveals the importance of some school and home factors such as instructional method adopted by teacher in curriculum transaction, basic facilities available in the schools, teacher's behavior in classroom, physical-natural environment of classroom and socio-economic status of the family; which justified the basic demand of deprived people to ensure satisfactory quality education in their schools.
- The other school and home contextual variables did not wield substantial effects in students' learning outcomes in focused slum areas. Such a disappointing nature of education, being given to slum deprived children, raises the urgent need to ensure quality education in these contexts.

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Book Reviews

PAUL Miller (Ed) (2013): ***School Leadership in the Caribbean: Perceptions, Practices and Paradigms,*** United Kingdom: Symposium Books Ltd, Pages: 204, paperback; ISBN: 978-1-873927-81-6

The book discusses various aspects related to school leadership development in the context of English-speaking Caribbean Countries – Jamaica, Trinidad and Tobago, Guyana and Montserrat – in 10 chapters, organized into three sections, *namely* Leadership Perceptions and Approaches; Leadership Practice for Performance or existence, and Change, Improvement and Leadership Paradigms.

Ten authors have discussed school leadership in Caribbean countries – more frequently referred to as CARICOM (Caribbean community) – by considering various contexts. Post-colonial influence is one of the important contexts considered in order to understand leadership in terms of perceptions and approaches. Nature and structure of the present education system and policies that significantly influence the education system is the second context. Natural disasters, such as volcanic eruption since 16 years affecting the normal life of people in Montserrat, socio-cultural life, such as matriarchal system playing a major role in the female population preferring to become teachers and ascending to principal position, influence of religion on gender – related issues and political milieu are some more contexts considered. Important questions raised in discussing school leadership in the entire book are regarding the assumptions about purpose of education, meaning of school leadership for principals and teachers, and ways and methods by which leadership is shared and practiced along with value attached to individuals in the education system. Many authors subscribe to transformational leadership as the most suitable for CARICOM discussing the theoretical underpinnings and empirical analysis as academicians and practitioner.

In chapter 1, it is rightly said that appreciative approach over deficit approach has to be adopted to build on the strengths and explore ways of working with the weaker ones by recognizing that it is a non-linear and multi- level process extending beyond job status to relate extensively to people and be consistent with the values prevailing in the society.

Chapter 2 explains how natural calamities impact the life of people in the region and the challenges faced by the school leaders to sustain the very education process. More than a decade of volcanic eruptions have altered the life situation of the people in Montserrat, wherein more than two- thirds of the population was relocated. Role of the school head to bring people together and ensure that schooling happens is explained by the school principal and it is a laudable attempt as a practitioner quoting personal experiences. A high level of conviction is reflected by the author about the effect of transformational leadership in the context that is more than 'usual' to bring a sense of normality in individuals' attitudes and behavior and sustain education. UN declarations and other theoretical concepts relating to sustainable development, sustainable education, critical pedagogy are also discussed in Montserrat's context.

Chapter 3 on school leadership and inclusive education is situated effectively around latest academic discussions related to inclusive education by studying the historical circumstances during colonial period, interrogating challenges and opportunities in the post-independence period and rethinking of transnational interchange between global and national contexts. Discussion and analysis focuses more on issues related to special education and rationale for inclusiveness using policy perspective from national and international angles. It has been effectively captured by the authors and has formed the core strength of this article. The article has adopted a holistic approach to highlight the importance of the right of children for education and equality of educational opportunities by Trinidad & Tobago and their commitment to fulfill the mandate. Having set the stage in this way, the authors proceed to discuss the history, exclusion and colonial context and attempt at reconceptualizing special education for Trinidad & Tobago, referring to Pilgrim report that advanced and expanded the discourse on special education to children with disabilities; school leadership as having two levels – one, school principals, who employ creative strategies to enhance effectiveness of their schools and meet the learning needs of children to overcome the restrictive capacities, and another is leadership by academicians, who engage in interrogating and critiquing reforms efforts of the developed world for developing country contexts.

The organization of the chapter 4 is clearly articulated and well presented. It begins with Contextualization, introduction, secondary education and school improvement under self-rule, the changing landscape of Secondary Education in Guyana, educational governance, and proposed educational leadership for change by the author and, finally, the conclusion. A detailed descriptive review of the Secondary Education in Guyana is traced with the help of data, political context of secondary education that contributed to the growth of 95 per cent literacy, socialist ideology that saw decline in the secondary education in the later years, and the period of market economy which once again opened up the focus on improving quality of SE in Guyana with a lag of 10 years. It also describes the introduction of new system of assessment approach shifting from One-size-fits-all to National Grade Six Assessment (NGSA) for students to enter into secondary education that uses cumulative assessment, instead of summative assessment, at the primary school level. In the post- independence era, the education system also saw a few major changes such as starting of multi-lateral schools, community high schools focusing on vocational education, President's college that catered to gifted children, Hinterland development program focusing on schools in the river belt cut off from the main geographical area of Guyana and also located more close to South America. The author is of the view that secondary education is more managerial in nature due to centralization, focusing on tasks, roles, maintenance *etc*., that restrict the system to take a paradigm shift which is further strengthened by government policies. Hence, author suggests a few measures for successful leadership such as removing dependence on inspirational leadership to effective management, shared leadership, sustained educational provision, utilization of resources, including human resources, cross -fertilization of ideas, establishing communities of learning, succession planning for school leader, that goes beyond years of experience as basis for promotion as school head till retirement.

Chapter 5 attempts to explain high performing schools in Jamaican Principals by understanding their passion, commitment and abilities using the primary data in Jamaican schools. The narratives about the three schools, wherein passion, commitment and abilities

of principals were studied, are well articulated and presented. This helps the reader understand not only the school leadership but also the school ethos and culture for high performance. Quotes from other research studies have been exhaustively used to substantiate the data and narratives used in the study.

In chapter 6, current and theoretical debates about teacher leaders are well articulated and presented in a lucid style to highlight the importance of teacher graduating to middle leadership base. The case for Jamaica is logically built, discussing national challenges as well as local issues, starting from describing the existing structure of education system theory and practice of teacher leadership, current prospects for building the middle leadership base in the form of renewed thrust in terms of preparing teachers for mentoring and university-school partnership, using specific cases as substantive evidences for the renewed thrust. Though it is not new in America, United Kingdom and Canada to prepare teachers to assume middle level leadership roles, the attempt by West Indies, which is a developing country, is certainly laudable as it tries to own the responsibility to undertake a qualitative shift in teacher education and school quality.

One of the prominent features of Chapter 7 is the novel way of doing the research review in the form of descriptive review to draw insights for providing support to school principals, who are expected to develop professionalism among teachers. This method helps the reader to relate research literature and analyzed data from the present study to derive learning-s. Besides, presenting the analysis using question- wise responses, identifying the themes etc., has resulted in high level of transparency for the data collected which is certainly to be appreciated. The attempt by the author, in helping the principals become professionally competent by developing a tool kit, is a novel idea.

In chapter 8, leadership for ICT education in Jamaica is discussed using two types of leadership, *viz.* strategic and operational leaders. Strategic leaders are principals and vice-principals and operational leaders are teachers and followers are students. The article describes the scenario of Jamaica whose challenges are similar to those prevailing in other developing countries. Hence, there is a lot of similarity in issues and challenges faced by developing countries in ICT education.

Chapter 9 discusses school leadership not as person-centric but as a collective responsibility, distributed authority, sharing opportunities, challenges and collaborative leadership in Jamaican schooling context. The author draws extensively from the works of Holmes to describe a person in terms of leadership - who, what and how. The article brings out succinctly the dichotomy between market forces that are operating against the understanding about real meaning of education, which is person- centric as embedded in CARICOM's cultural context. In discussing the challenges faced, Jamaica is used as a case and secondary data is used for enumerating the current challenges, achievements by using UNESCO's publication in 1999.

Chapter 10 brings out a unique feature of Caribbean countries, referring to Jamaica and Guyana where women teachers and principals are significantly higher at all levels of school education, and discusses why it is important to avoid using universal explanations that produce homogeneity when there is a significant heterogeneity even among women leaders in terms of dominance, privilege, opportunity, and gender script across Caribbean countries. The Caribbean society is matriarchic and its influence extends beyond leadership at home but with "men on top" syndrome. The context is also strongly embedded in religious beliefs and practices drawn from the Bible representing men as the visible face of leadership.

Even though all the articles are grouped into three sections, review has been done for every article as these three sections do not give extra significance in terms of overarching introduction and conclusion. The distinction used referring to human capital and social capital; leader and leadership seem to have limited scope in understanding approach and development in Chapter 1.

Similarly, in Chapter 2, the discussion on the theoretical underpinnings and UN declarations and the like on sustainable development, critical pedagogy, *etc*., has somewhat diluted the extempore spirit of the author in sharing his experiences. He could have focused exclusively on sharing the experiential learning gained in those difficult times of volcanic eruption with the help of facts, cases, and anecdotes in a free flowing style. It would have added immense value and insight and connected emotionally to educationists, practitioners, policy makers, implementers, teachers, school leaders and also parents.

The discussion on British colonial rule, its style of functioning and impact in Trinidad &Tobago in chapter 3 is not very different from that of several other nations, which also suffered the same exclusion and extinction of the indigenous system of education under the colonial rule. Hence, it would have been useful if authors had drawn from other similar country contexts and attempted to address the issue of inclusive education in a more *inclusive* way. Very little is said about the role of school leadership in making inclusive education a full reality though the efforts of the school principals is appreciated and given the recognition it calls for. For instance, a few examples of creative ways, through which school leaders attempted actively to make inclusive education a reality, could have been used to highlight their efforts. This approach would have made a difference in the otherwise constrictive environment in which schools operate and exist in Trinidad and Tobago.

In chapter 4, though the author has been able to exhaustively trace the development and changes in the secondary education system during the pre and post- independence period and raise critical issues of school leadership, there seems to be a disconnect between the need for change in the school leadership and proposition for a new approach to school leadership. If educational leadership is necessary for bringing about change, the type of change also has to be envisioned. The article falls short in this respect which has led to making general suggestions about educational leadership rather than addressing Guyana's context. An additional section on situational analysis, based on data and evidences to plan for bringing actionable changes, would be useful to overcome this limitation. In addition, it also reduces the vagueness in discussing the relationship between governance and school leadership and issues in school leadership as presently seen.

Chapter 5 is unique in using narratives that contribute to a rich reading and insight into school leadership. Notwithstanding the exhaustive narratives, the sample size of cases considered is only three and this is too less to draw a general conclusion for the entire Jamaica. The study could have considered all the 20 principals interviewed as this would have been an appropriate sample for case study to research on high- performing principals, especially with regard to their personal qualities.

Developing middle- level leadership with the help of senior teachers, as envisioned in chapter 6, is a new learning, which serves as an example for other developing countries, such as India, to seriously consider for improving the school quality and leadership skills. For example, the present under- functioning BRCs and CRCs can be utilized as resource hub of

such mentors forming middle level leadership base providing support to a cluster of schools before graduating to school principal's role.

Chapter 7 on school leadership and staff development could have been strengthened if implications were drawn from the narrative reviews of researches in terms of conceptualization of suitable actions for improving school leadership in the present study. The proposed tool kit for school principals reads more like a set of suggestive steps or simply suggestions that are largely general in nature. On the other hand, a tool kit will contain many other aspects such as purpose defined, instrument developed that is relevant to the purpose, concepts, principles and theory (wherever required), method of using it, instructions, method of analysis and utilizing the analysis for schools, and so on.

The article in chapter 8 could also have been enriched if the very ICT was used extensively in writing this article, where "every click" (used in the title of the chapter) could have mattered even more by referring to other developing country contexts wherein there are similar challenges and issues.

To what extent the data used from UNESCO source dated 1999 is relevant in 2013 and whether the challenges continue to remain the same are questions that merit consideration. Besides, it also needs to be considered as to whether there are no research evidences between 1999 and 2013 to update and substantiate the challenges listed in UNESCO document. Due to these reasons, the rationale for choosing transformational leadership over system leadership, the meaning of transformational leadership for Caribbean contexts, sharing leadership versus collaborative leadership for implying "togetherness" (as stated in the title of the chapter) has rendered itself too weak (chapter 9).

Caribbean's cultural and social context of matriarchic system has similarities with Kerala's social system and implications for school education where there are more women teachers than male teachers (chapter 10). Hence, we can also see its significance to the Indian context, with special reference to Kerala.

Although some of the above observations are made in reviewing the book, many of the contexts considered in all articles have similarity with Indian school education system as well as those of other developing countries. The learnings emerging from this book are relevant for India and other developing countries. Such learnings cover a) exhaustive review of research studies; b) debates on school leadership; c) policy related matters on school leadership and d) developing middle-level leadership for teachers.

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KOLHATKAR, M.R. (2012): ***Survey of Higher Education (1947-2007)***, Concept Publishing Company Pvt. Ltd., pp, xxiv + 423, Price Rs. 1250.

The book under review attempts to present the reader an exhaustive survey of India's higher education in the post-independence era, covering the period between 1947 and 2007. It also touches the historical background covering period 1817- 1947. It provides a synoptic view and genesis of modern higher education bestowed to us by the British in the colonial

period. This brief description relates to (I) Evolution of General Higher Education (1817-1947) and Professional Education (ii) Medical Education (iii) Nursing Education (iv) Homoeopathic System of Medicine (v) The Bhore Committee Report on Health Survey and Development (vi) Technical Education (vii) Agricultural Education and Research.

The book contains recommendations of the Bhore Committee (1943-46) which, somehow, has been ignored in historical literature relating to medical education. According to the author, this committee report on Health Survey and Development was a path–breaking blueprint for post-war health planning in India based on the community health approach.

The author mentions five landmarks in the development of higher general education between the date of establishment of metropolitan universities and attainment of independence. These, in a way, have impacted the development perspective of modern higher education between 1817 and 1947. These five landmarks are: Curzon's legislation on universities (1904); Calcutta (now Kolkata) University Commission Report (1919) known as Sadler Report; Montford reforms leading to Dyarchy (1919-1936); Establishment of Inter-University Board in 1925; and Sargent Plan (1944).

The landmark policy stipulations laid the basic foundation of universities, their structure, courses, teaching, faculty positions, examination system, research and extension programmes along with the establishment of R&D organizations in the pre-independence period.

In the introductory chapter, wherein the author devotes an analytical approach towards methodology in the treatment of the subject, a politico-administrative type of contemporary history of Indian Higher Education with a glance towards the 'social' (pp. 8-9) has been adopted. Wherever possible, policy framework and development perspective in higher education of the British and the U.S. systems have been contextualized as a precursor to Indian system of higher education. Higher education has been discussed broadly in its three main components viz. (1) Teaching (2) Research and (3) Extension.

Again, the author has also provided his own notes/observations/comments/ suggestions while dealing with the issues and concerns regarding a particular theme on the subject along with development profile and policy recommendations of other authorities concerned. He has shared his views on the issues and problems of higher education. He has not hesitated to point out the missing link/facts or information of other authors in order to put the record straight rather as a stricture. The treatment to the subject has been based upon the access of the author to original official documents, including policy statements, the official reports of committees and commissions or task forces appointed by the Education Ministry and organizations and, at the basic level, the Annual Reports of Ministries and their Departments. Data and statements of the Five- year Plans have also been used. The author admits that the survey has been constrained by availability of information on various aspects, including policy, programmes and their implementation. In spite of that, the survey covers a broad spectrum and vital information to provide a good reference document for research on higher education since 1817 till 2007. Of course, it is a huge challenge for any single author. It is also an encouraging aspect that the text also has been updated even upto 2010, with particular reference to the recommendations of National Knowledge Commission (NKC) and the Yashpal Committee Report as a prelude to the National Commission for Higher Education and Research (NCHER).

Besides two chapters (one as introductory and the other on historical background), there are other 14 chapters divided in to III distinctive parts. First part of six chapters includes one chapter on an overview of growth pattern of higher education between 1947 and 2007. The author has compiled the number of colleges functioning at the time of establishment of the Presidency universities to be 19 (p, 29) by using different authentic sources (14 in Calcutta, now Kolkata) vide Bruce T. Mc Cully (1940): Madras, now Chennai (02) vide University of Madras (1957, p, 145); and Bombay (3), now Mumbai, vide Dongerkery (1957, p, 6). In 1947-48, India had 20 universities and 459 colleges with an enrolment of 2,28,881 (1,83,238 in Arts and Science colleges and 45,643 in professional colleges). The author has provided detailed statistics on growth pattern of higher education in time series from 1950-51 through 2006-2007 on number of universities, colleges, student enrolment, percentage increase over the previous year and number of teachers (Annexure 3.1, pp, 70-71). There are exclusively three chapters on University Grants Commission (UGC). These three chapters on UGC cover UGC in general, UGC (1956-1980), and UGC (1980-2007). A specific detailed description is found on Indian UGC in the making which starts by citing the reference period of U.K UGC in 1919 but in the case of Indian UGC, the specific recommendation of the Sadler Commission (1919) has been quoted in making it. One chapter is on Allied Organizations: National Assessment and Accreditation Council ((NAAC), Distance Education Council (DEC), Inter-University Board (IUB)/Association of Indian Universities (AIU), National University of Educational Planning and Administration (NUEPA) etc.. There is one exclusive chapter on the role of Research Councils like Indian Council of Social Science Research (ICSSR), Indian Council of Historical Research (ICHR), Indian Council of Philosophical Research (ICPR), Indian Institute of Advanced Studies, Shimla etc..

In the II part, there are five chapters which cover mainly Technical and Engineering Education; Management Education; Teacher Education; Legal Education; Medical Education and Agricultural and Forestry Education.

The last part covers three chapters, which include common problems of higher education and professional education; the National Knowledge Commission (NKC); the Yashpal Committee Report and the proposed National Commission for Higher Education and Research (NCHER). The last chapter presents an overview and prospects, with focus on globalization and higher education in India.

In the chapter on 'Some Common Problems of Higher and Technical/Professional Education', the author has identified mainly three significant common problems viz. (I) Medium of education(instruction), which impacts directly the process of teaching–learning, (ii) Financing of higher education, which indicates the priority accorded to the sector and (iii) A super regulator for higher education and research. On the concluding remarks on the National Knowledge Commission, the author observes: "There is no doubt that the proposals made by the NKC are at once ambitious and ambiguous. But they needed to be debated and discussed across several for a before arriving at a final decision and in particular, along with the Yashpal Committee Report on joint review of the UGC and AICTE which led to the NCHER" (p. 364).

On the whole, it can be stated that this survey provides a detailed account of the development of higher education in all its dimensions which would be found useful for the

student-community, social scientists, contemporary historians interested in education, policy-makers and educational administrators and, above all, those readers who have keen interest in the development of higher education in India.

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MARK Bray and Ora KWO (2014): ***Regulating Private Tutoring for Public Good: Policy Options for Supplementary Education in Asia,*** CERC Monograph Series in Comparative and International Education Development No. 10, University of Hong Kong and UNESCO Bangkok Office, pp. 93, ISBN: 978-988-17852-9-9

Over the years, educational performance in schools has been overpowered by the 'fear of competition' that this trigger to 'compete and stay ahead', has served as catalyst to seek private tutoring. Private supplementary tutoring, variously labeled as *'zukus'* in Japan, '*hagwons'* in Republic of Korea, '*tuitions'* in India and '*buxiban'* in Taiwan, is a pervasive phenomenon that is rampant across Asia and indeed worldwide. It is unfortunate that even in India, irrespective of the location, dependence on tuitions has grown in demand to such an extent that it has dominated the lives of school- going children, even at the elementary level. Even though most of these practices are just replicates of regular schooling, offered at a cost, parents have admitted that reliance on tuitions is '*unavoidable'* (The Pratichi Education Report, 2002). Today, this sector has expanded and emerged as an Industry wherein the operations of these tutoring agencies are not only local or area-specific, but have spread across countries. Under such circumstances wherein there is a large increase in expenditure towards private tutoring, the basic right to free education and also the credibility of any regular schooling are being threatened. This pre-disposition towards regulating commercialization of education, which is the focus of this book being reviewed, raises concerns about the shift in our educational focus. This book was launched by UNESCO's Asia and Pacific Regional Bureau for Education (UNESCO Bangkok) on 31st March 2014. The book authors, Mark Bray is UNESCO Chair Professor in Comparative Education at the University of Hong Kong and Ora Kwo is Associate Professor in the same University.

This book primarily focuses on the significance of regulating private tutoring sector, as it is believed by the authors that it has implications for economic and social development of any country. It largely highlights the prevailing practices of tutoring, and regulative approaches adopted in different Asian countries. Private tutoring, as referred by them, are those offered as supplementary to academic subjects in exchange for a fee. Based on the trends noticed, recommendations have also been made on different regulatory parameters that countries could consider, in accordance with their socio-cultural context. The authors, however, emphasize that the outlook towards these regulations should be protection and promotion of the public good, i.e support both the providers as well as consumers. The first chapter gives an overview of practices visible in different Asian countries, which they infer to be as a mimic to the mainstream schooling and, hence, otherwise termed as 'shadow education'. Although, tutoring of other forms are being offered for those subjects not offered in school or to elaborate upon regular schooling, the focus here has mainly been on shadow

education, which, according to them, is beneficial to its recipients-all types of learners, parents as well as the wider community. They argue that through private tutoring, slow learners gain by keeping pace with their peers, while fast learners have opportunities to strengthen their scope of achievement, while its providers, particularly those unemployed, derive their source of income from such practice. Hence, they feel that despite its benefits, this part of education did not receive adequate attention as required. At the same time, they have also approved its drawbacks, of not being economically viable for all layers in the society, can escalate social inequalities, are likely to exert pressure on students and may also have a negative backlash on regular schooling system. Moreover, teachers who offer tutoring are likely to neglect their regular school duties in order to create demand for the same, and incidence of conflict in the pedagogical approaches between the two institutions are likely to occur. The authors, hence, argue that the Government intervention is necessary to formulate regulations and monitor this private education sector.

The purpose of shadow education, according to their conceptual framework, may lie in a range between – for personal growth to examination purpose, and this can be offered in any context that scale within school to anywhere outside school. As this book is more concerned about tutoring, irrespective of its location, offered for school subjects and that demands financial remuneration, it is opined that private tutoring provided by teachers within schools may be free-of-charge (p. 6). Moreover, they do not subject their views on teachers undertaking tutoring outside schools, and their silence on this issue may imply that a teacher undertaking tutoring outside school is acknowledged. Rather they recommend that the Government, while formulating the structures for regulations, need to consider their contextual variations, such as cultural and economic diversities, colonial histories, geographical dimension and public attitude towards private tutoring and its providers. They have suggested that the extent of decentralization in policies may depend on the geographical representations of each country, wherein for small countries like Brunei, Darussalam, Maldives, Singapore, the regulations can be relatively centralized, while large countries like India, China and Indonesia can incorporate more parameters of decentralization.

The following chapter, which discusses issues relating to 'what' and 'who' should be regulated, begins with a description of the scale and spread of private supplementary tutoring visible in different parts of Asia: east, south, north and central Asia. It is seen that extensive tutoring is manifest in east and south Asia and even though such a trend has not reached its intensity in certain parts of central, north and south-east Asia, the phenomenon is spreading in these regions too. Comparison of cross-national researches on private supplementary tutoring patterns across 32 countries (Table 1, p. 13), indicates that private tutoring is offered right from pre-school till the university level. One of the commonalities noticed among these countries is that irrespective of the educational level or grade, tutoring is prominently offered for typical core examination subjects, like Maths, Science, English and national language and is offered in various forms, viz. one-to one, small group, large classes and via technology. However, it is difficult to draw conclusions and make generalizations since most of these findings are based on micro-level studies, which are confined to a few schools in select localities or districts. Further, some of the questions unanswered are: Is there variation in terms of the trend or extent of private tutoring taking place for different grades, subjects and also geographical locations like rural-urban-suburban etc.? What purpose was tutoring actually sought for (i.e. entrance examinations, basic learning, remedial, for high-ability students)? To what extent they replicate the school curriculum

across countries? Another feature highlighted in this chapter is on the diversity of prominent providers operating in different countries, and it is seen that in some countries, the providers are from the mainstream, like teachers in Georgia and State Testing Centre in Uzbekistan and, in the case of Bangladesh, Macao, Taiwan and Thailand, they are mostly private agencies. In favour of teachers, the authors have argued that even teachers from prestigious schools gain credibility for tutoring from their work, since parents and students believe that they are better aware of the school syllabus, as noticed in Bangladesh, Cambodia and China, and, in Vietnam, 70 per cent of the students receive tutoring at school. In terms of providers abiding by the regulations, in Bangladesh only seven per cent have obtained approval from the Government, while in Thailand, majority of the registered institutions are from the city-Bangkok. This scenario may indicate that even by bringing in regulations, certain countries have not been able to ensure that providers abide by them. The authors end this chapter by stating that families have limited choice for enrolment in regular schools due to residential and admission system constraints, whereas they face no such constraints while making choices in the private tutoring sector (p. 23-24). This may be a subjective opinion since, be it schooling or tutoring, the availability of choices largely depends on the socio-economic status of the parents and, hence, one is aware that higher economic status presents more and better choices while those at the lower scale have limited choices.

The third chapter discusses on 'why' tutoring services need to regulated and some of the reasons elicited in this context are protection of consumers, children and parents from vulnerabilities, guarantee safe learning environments and reducing inequalities (socio-economic, gender, racial/ethnic). They are concerned about parents being often carried away by misleading advertisements that are resorted to by tutoring industries to promote tutoring and also contract conditions which are not clearly understood. It is also realized that while the mean expenditure on supplementary education is higher among high income households as compared to the low income households, however, in terms of percentage expenditure of their respective total incomes, the share is apparently higher in case of low income households. Similarly, with regard to gender inequalities, it is seen that the preference for sending girls for private tutoring is not consistent across countries. It is, hence, opined that even if the Government cannot regulate on matters of genders, efforts to monitor and expand awareness may be undertaken. Even in racial/ethnic cases, the percentage of ethnic minority children receiving tutoring is comparatively lower than the ethnic majority children. Further, this is also prevalent in rural-urban communities, wherein the percentage of students in urban areas receiving tutoring is higher. It is reasoned that the percentage of rural students is less due to less opportunities when compared to the urban areas (except in Sri Lanka). From the above justifications, it appears that the authors have overlooked the issue of how regulating private tutoring fees may actually benefit high income households by reducing their expenditure and even if the percentage of expenditure among low incomes groups is lowered, providers may compromise on the quality of tutoring. Further, being aware that parents are vulnerable to being lured by misleading tutoring advertisements, there is no stand taken on the issue that, at times, the tutoring practices can be equivalent to or even poorer than regular schooling.

Another matter of concern raised by the authors is about how the routine of private tutoring can undermine regular schooling. This is so particularly in the case of teachers intending to undertake tutoring classes, who can themselves create the demand for tutoring, by showing better teaching efforts in tutoring compared to regular school classes. In some cases, teachers may also assume that students have private tutors and, hence, may need lesser school academic support. From the recipients' perspective, student tend to show more respect towards their tutors compared to their teachers, and even prefer to spend more

time for tuitions rather than schools, as noticed in Sri Lanka & Vietnam. Teachers' deliberate attempt to reduce the content coverage in schools in order to raise the demand for tutoring is indeed a serious issue of concern. This clearly indicates how tutoring can have an adverse effect on regular schooling and accelerate the phenomenon of corruption. In this regard, contradictory views of the authors are noticed, as, on the one hand, they feel that tutoring provided by teachers can result in irregularities in their work, while, on the other hand, they also maintain that tutoring conducted by teachers within the school premises be free of charge (p. 6). In effect, they are in the process implying that tutoring outside schools can be charged by teachers. In general, regulations with regard to teachers have not been uniform and also resorted to on ad hoc basis. The extent of liberty for teachers varies from country to country, as it is considered either as 'strictly prohibited' or 'discouraged' or 'even permitted with prior approval from the Government'.

Taxation is another form of regulating tutoring. According to the authors "*Tutors feel that their professional gains are added legitimacy and respectability when they pay taxes".* At the same time, they also argue that imposing taxes can raise fees and reduce tutor salaries. Not much has been discussed on taxation, except that, in addition to the Ministry of Education, other Ministries are involved in such regulation in a few countries. Apart from taxation, varied licensing procedures or conditions are being stipulated by different countries and they are related to threshold for class size, regulations for registration, timings or days of operation, tutor qualifications and minimum infrastructure facilities. In general, it is observed that aspects related to curriculum, textbooks and fees' structures have been neglected to promote flexibility while reducing administrative work. The authors have also expressed that the cost of regulating informal tutoring, i.e. of students and other self-employed persons, might turn out to be higher than the benefits it offers. Internet tutoring is also the most difficult form to be regulated since tutors and students may not reside in the same country or place. In such context, raising the awareness among consumers regarding quality and safety are best recommended. To facilitate monitoring and regulating, they also suggest that the Government could build multiple partnerships, such as with other Ministries, community bodies, schools, media, racial and religious bodies and even non-governmental organizations. Overall, it is felt that the role and status of the Government is undermined if no regulations are introduced. Hence, it is stated that even if the Government does not impose rules, the tutoring industry should themselves be pro-active by forming associations which self-regulate themselves in order to preserve their autonomy. For instance, Japan had, in this context, gone to the extent of holding its first open examination for candidates throughout the country in 2008 for tutors.

The books concludes with an argument that regular schooling, due to over-regulation, has become more bureaucratized and standardized, while tutoring, which is under-regulated, provides flexibility in terms of curriculum, personnel, duration and tutoring and location. Hence, irrespective of the cost incurred, Government needs to strike a balance while formulating these regulations, depending on the extent to which multiple collaborations can be facilitated. Overall, the book propagates the need for tutoring to be regulated but not prohibited, since attempts to prohibit have failed, as in the cases of Cambodia, Myanmar and Republic of Korea. Simultaneously, they also agree that prohibition reduces the scale of tutoring without completely eliminating it.

This book does makes an attempt to demonstrate that expenditure on private tuitions is widely increasing due to the growing aspirations of parents, who, to some extent, are not convinced with the capacities of a regular teacher and the school system. At one point, it is true that the demand for private tutoring is created by the inadequacies of the existing school education system and policies, especially because of its competitive approach,

overloaded curriculum and examination-oriented bias. As cautioned by Noble Laureate Amartya Sen, this practice disrupts the school system since tuitions made teachers less respected and diminished their central role in education and, moreover, such arrangements made improvement in schools more difficult since the more influential families have less stake in the quality of what is done in schools. This may also mean that tutoring actually aggravates social inequalities. It is, thus, uncertain as to what extent regulation can counteract inequalities since providing benchmark on fees may indirectly benefit the high income households more, while the low-income may lose in terms of quality of education. Bringing in regulation may also legitimize the whole process of tutoring and this would enhance the over-reliance of parents on them. It is also feared that the authors' outlook towards tutoring may mislead selected countries wherein private tutoring is not intensively practiced or even prohibited, especially wherein the restrictions are made for teachers. The biggest challenge of such regulations, if introduced, would be to monitor the quality of tutoring service provided, since it would be difficult to ascertain the actual impact of tutoring on learner performance. Rather investments and efforts should be made to diminish over-dependence on private tutoring by introducing better curricular reforms and educational practices in order to upgrade the quality of regular schooling prevailing today.

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DAS, S. K. (2013): ***India's Rights Revolutions – Has It Worked for the Poor?*** Oxford University Press, pp. 1-131, Price: ₹ 795.

India, since its Independence, has promulgated a number of legislations/enactments to protect and promote individual's benefits covering different social groups/religious ideologies. When such fabrics were unable to protect social justice and equality of the people, a separate legislation containing Rights of the People; came up promoting accessibility of the resources and service for those who are asset- less and facing challenges in day- to-day life.

This book is a connotation of four Rights viz. 1. Right to Information Act (2005), National Rural Employment Guarantee Act (2005), Forest Rights Act (2006), and Right to Education Act (2009) which were formulated by the Congress and its Alliances (UPA-I) in recent years to promote socio-economic development of the people in the form of Human Rights perspectives. The author has discussed effectiveness and utility of each of the Acts.

Conceptually, these rights are universal and belong to everyone in the country. All these Rights are possessed by all persons, by virtue of their common humanity to live a life of freedom and dignity. All Acts are inalienable and indivisible. There are no hierarchies among different kinds of Rights such as Civil, Political, Economic, Social and Cultural. All are equally necessary for a life of dignity, justice, empowerment, especially for exploited social groups.

There are five chapters in the book having the following titles: Chapter 1) The Rights Discourse, 2) Right to Information (RTI) Act, 2005, 3) National Rural Employment Guarantee Act (NREGA), 4) Forest Rights Act, 2006, and 5) Right to Education Act 2009 along with Conclusions (What needs to be done), Index, bibliography besides a large number of Tables.

Chapter 1 covers Universal Declaration of Human Rights (UDHR) 1948 which is witness to various revolutions in the processes of transforming these rights into reality. Human rights emerged as the Fundamental Rights, which promote human development and social justice. Most of the countries have welcomed UDHR. Chapter 2 ("Right to Information (RTI) Act, 2005) empowers citizens to ask information from the public authority, thereby making the Government and its functionaries accountable. The important thing of this chapter is that it talks about effectiveness of the Act.

Chapter 3 (National Employment Guarantee Act 2005) discusses about rights-based-framework of the Wage Employment Programme by making it legally binding for the Government to provide wage employment to the aspirant. Article 21 of the Constitution, also enshrines the Right to Life, encompasses livelihood too under its ambit. The present wage employment NREGS represents an extension of the rights under this Constitutional provision. This chapter analyses benefit to the poor sections.

Chapter 4 ("Forest Rights Act 2006"), which is also known as "The Scheduled Tribes and other traditional Forest Dweller Act", confines itself to the traditional right of the forest dwellers on land and other forest-based resources. This chapter devotes itself to the implementation of the Act while analyzing its impact on the poor. Chapter 5 (Right to Education Act 2009), which is popularly known as "Right to Free and Compulsory Education Act" providing for free education to children between the age group of 6 – 14 years, analyses the provision of the Act that ensures enrolment in Government-run schools for children from poor families.

The "Conclusion" of this book critically examines the effectiveness of each of the Acts, awareness among people, loopholes, role of civil society organizations and activists, failure in the mobilization of the Gram Sabha and circumstances behind the formulation of Forest Act.

This book is useful for social activists, policy-makers, scholars and rural development professionals who are keen of facilitating benefits of discussed Acts in the book.

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KLEES, Steven J.; SAMOFF Joel and Nelly P. STROMQUIST (eds.) (2012): *The World Bank and Education: Critiques and Alternatives,* Rotterdam: Sense Publishers, ISBN: 978-94-6091-901-5, pp. 245 (paperback).

World Bank has been the single largest source of external aid for education for several decades. More importantly, it being not only a financial institution, but also "a key actor in determining the architecture and workings of the global policy economy" (p. vii), became the most powerful international organization in influencing and shaping educational policies and programmes in many developing countries. In the recent years, its role as a policy advocate or policy "entrepreneur" has been stronger than as a funder. As Klees and others described, it is indeed "the architect of what has become a truly global education policy" (p. 49). For these twin roles that the Bank played, it received both appreciation and wide

criticism. Quite a few scholars have critically examined the role of the Bank in shaping educational development in developing countries. Among others, P.W. Jones (*World Bank Financing of Education: Lending, Learning and Development*) offered a thorough account of the functioning of the Bank in funding education. First published in 1992, it went for second edition in 2007. Not only on issues relating to financing of education, Bank's policies and strategies with respect to many sectors, including specifically education, have been subject to severe criticism. Now largely concentrating on the *Education Strategy 2020* of the Bank (2011), the latest "policy document, a World Bank vision for the future worldwide delivery of education" (p. 30), Steven Klees, Joel Samoff and Nelly Stromquist give us a more up-to-date critique of the approach of the Bank with respect to a few selected issues relating to educational policies and approaches. The volume of 14 very well written articles covers critical contemporary educational issues that the Bank addresses or should address, such as the Bank's framework for Education For All, poverty, students' learning, teachers, quality of education, gender dimensions, human rights, and privatization. Though the Bank's strategy papers, including the *Education Strategy 2020,* was subject to external review and wide consultations (this *Strategy* paper in as many as 53 countries), it is argued that the Bank has been unresponsive to critiques.

World Bank is one organization that has firm faith in and promoted the neo-liberal ideology; it believes in market-based solutions to every problem, and has been a staunch advocate and supporter of privatization of education. The Bank also strongly believes in the human capital theory and its narrow interpretation that development means economic growth (and probably nothing else), ignoring several non-economic but vital issues relating to education as well as development, including the human rights-based approach to education. It also believes that 'one size fits all' and that its prescriptions are universally applicable. It also strongly works for integration of developing countries, including the least developed countries, into the international political economy, often at the cost of development of those very poor countries. These are not new beliefs and approaches of the Bank. Many of the Bank's policy papers, strategy documents and other documents have been stressing these aspects as the Bank's main thrust arguments and approaches. These beliefs and approaches are also clearly visible in the 2020 Strategy paper of the Bank. As Antoni Verger and Xavier Bonal show in their chapter, many of the policies proposed in the 2020 Strategy paper can be traced back to the policies and strategies proposed in earlier policy papers. In some sense, there is nothing new; it is the same old Gospel, as Klees (p. 50) and Angela de Siqueira (p. 69) argue. Several authors in the book concentrate on some of these issues and offer a strong critique of the Bank's policies, strategies and approaches. They concentrate on neo-liberal ideology of the Bank, particularly privatization, the myths about 'evidence-based' policy of the Bank, narrow interpretation by the Bank of education and learning, and neglect of issues relating to equity, gender and human rights.

Sangeeta Kamat describes how the neo-liberal ideology of the Bank led to formulation of policies such as structural adjustment that produced disastrous results in many developing countries, including making some of the countries in Africa fall into the debt trap. Both primary education and higher education were victims of Bank's policies, as secondary education was completely neglected for a long time, though there are some turnarounds later in the Bank's approaches.

One of the dominant themes of the Bank's strategies that is also criticised by many scholars in the volume refers to the Bank's "energetic support for privatization in multiple

forms," as Samoff describes (p. 117). Many policy prescriptions of the Bank, such as deprofessionalization of the teaching corps, fee reforms, reforms on funding including conditional cash transfers, vouchers, public-private partnership, managerial reforms arguing for school choice, competition and decentralization and other demand-side interventions, some of which have been commented upon in the book under review, can also be seen as a part of the privatization strategy. As Susan Robertson has documented analytically, the arguments in favour of privatization took different shapes over the years; they started in the Bank in the 1980 paper that argued for a few pockets of private sector institutions; then in favour of public-private partnerships on a large scale in the *Education Sector paper 1999,* blurring the boundary between public and private sectors, and now, in the *2020 Strategy* Paper, to redefine education system to include the private "within" collapsing the boundary between public and private.

While Robertson and others in this volume present a steady and somewhat smooth progress in the Bank's efforts towards private education, Mundy and Menashy (2014), presenting a critical account of the Bank's changing and increasing role in strengthening private education in a recent paper in *Comparative Education Review*, argue that the Bank's role "has been far more complicated than most critics have discerned" (p. 401); the Bank was influenced by the existence of a strong epistemic community of neo-classical economics in-house and the external support from the USA for a strong privatization agenda. Anyhow, few disagree with Klees when he argues that with such a long-run strategy of privatization, the World Bank became a major player in the reproduction of poverty, inequality, and oppression throughout the world through capitalist, patriarchal, racist and other structures.

Most of the contributors of this volume also observe that the World Bank *strategy paper Learning for All* has little to say about learning and even less about all. As Born Nordtveit notes, the Bank's imagination of the world itself is defective. It glosses over the global economic crisis, which is a result of global crisis of capitalist accumulation, as Sangeeta Kamat observes. In the neo-liberal framework, 'learning for all' is interpreted in a way that is much different from the interpretations of Mahatma Gandhi, Ivan Illich, Julius *Nyerere*, etc.. As a result, the strategy paper proposes "learning without learning" (Joel Samoff), and the Strategy paper "in many ways remains poetry that is essentially positive and upbeat, imagining happy world of 2020" (p. 30). Many authors also point out that the Bank's knowledge is shallow; it is based on a fragile base consisting of research done by the Bank staff and consultants. The self-referential system in the *Strategy Paper* and also in other papers of the Bank, along with the Bank's approach to ignore or to suppress or even to twist research that gave uncomfortable findings, is widely commented upon. Steven Klees questions the claim of the Bank as providing evidence-based or research-based policy analysis and argues that the Bank makes only pretence of objectivity and inclusiveness. It is not a "'Knowledge Bank', only an 'Opinion Bank' and, worse still, an opinion bank with monopoly power," it is a "Monopoly Opinion Bank" (p. 57), where opinions are generated with no debate (p. 61).

Robert Arnove, in the *Foreword* to the book, mentions that the contributors of this value are not satisfied with just criticizing missteps and missed opportunities, but they also offer alternative visions and provide useful suggestions as to how the Bank, with its enormous resource and strategic position, can contribute to appropriate and sound policies. The book serves the first purpose adequately but not the second one. It is only in the last chapter Anne Hickling-Hudson and Klees refer to the second issue. It is felt that the Bank cannot be

reformed; the only option is to dismantle it and create a new forum called Global Fund for Education that would reject neo-liberal ideology, and be committed to proper education development. Hudson and Klees outline a few important features of the proposed Fund. This could have been taken up by all the contributors for intense discussion along with their criticism of the Bank's approaches.

As many as 15 well-known scholars in comparative and international education came together to offer a strong critique on the Bank's strategy paper. The scholarly critical writings should attract attention of many policy makers, including those in the World Bank. Without casting any doubt on the richness of this important book, one or two points may be noted. A majority of the contributors to the volume are located in the western universities, though every one of them seems to have a very good understanding of developing countries' problems. Only three are actually working in developing counties – two in South Africa and one in Brazil. Scholars from developing countries could have added to the richness of the volume with their direct experiences with the Bank's policies and approaches. Secondly, though some have provided anecdotal references, a few case studies would have been more telling. Thirdly, in a book of this kind, repetition of ideas and arguments cannot be avoided, but some effort to reduce it would have made it more readable. Fourthly, few scholars in the collection note any strengths and plus points of the Bank, or the constraints under which the Bank works. For example, as Mundy and Menashy (2014) observed, the Banks' practices are also shaped by borrowing and donor-country preferences and a wider set of internal and external forces. Recognition of these factors by the contributors of the volume under review, would have given us a more balanced critique of the Bank and its policies, even though the main diagnosis and final conclusions are likely to remain unchanged. Despite these minor points, one has to mention that it is a very stimulating reading on the Bank's educational policies and approaches.

Readers of this highly engaging book by Klees, Samoff and Stromquist may also like to read another edited book (by Collins and Wiseman 2012) which has also offered a strong critique of the Bank's strategy paper, which was also published around the same time. Together, they provide a wider and deeper understanding of the issues involved.

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