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# Growing Role of Non-State Actors in Indian Pre-Tertiary Education

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## Abstract

Our aim in this paper is to provide a global systems-view of the changes in the Indian schooling (pre-tertiary) sector over the past two decades, especially the interplay between a medley of global and domestic non-state entrants and a State tasked with the mission of universalising school education. Besides the obvious interface in the regulatory arena and in explicit collaboration arrangements, the influence of non-state actors extends to policy making and the shaping of the education ecosystem, much of this opaque and inscrutable to the general public. Not merely the means of providing education, but the very nature and purpose and philosophy of education, have come under negotiation, sometimes through open debate but often through inscrutable systems of influence.

The digital era of the 21st century has added a further layer of complexity to a globalized world, even as countries like India are having to contend with the growing diversity in their learner population as they seek to expand the reach of literacy and education within their borders.

We examine the alternatives to state provision that prevail in the Indian school sector, and their relative effectiveness in achieving the twin goals of educational access and quality. We then go further beneath the surface and examine the language of policy that defines these attributes, to detect the common threads with global educational reform agendas and development practices, but also the divergences and idiosyncrasies native to our ecosystem.


**Keywords:** Pre–tertiary Education Policy, Non-State, Privatisation, India.

## 1. Introduction

The Indian K12 education landscape has witnessed a remarkable transformation, especially in the two decades that span the period from the mid-nineties to the middle of the present decade. While the State, especially the Government of India, has made an aggressive bid to universalise access to elementary education followed by preliminary efforts to do the same for secondary education, the private sector has also stepped up its efforts to cater to the increased demand at all levels. This briefly elevated overall education spending in a country where the average literacy level is at a dismal 74%, to nearly 4% of GDP which is still well under the norm of 6% in most OECD countries and even in a BRICS country like South Africa. The initiatives of the Government of India, in tandem with state governments and with the private sector, to universalise access to school education, were undertaken in the backdrop of a global push to universalise elementary education since the nineties, which also brought in its wake a new crop of global and domestic non-state actors who began to wield a considerable influence in reshaping the K12 landscape in India. Our effort in this study is to understand and set out the dimensions of such influence, along with their evolving global context.

Globally, education had been considered a human right and a public good since the end of World War II. However, the debate over whether it ought to be considered a public or a private good has been ongoing, since by its very nature it serves both public and private interests.

Levin's (2000) description of the 'peculiar nature of education' supplies the motivation for the debate:

> "It (Education) addresses public interests by preparing the young to assume adult roles in which they can undertake civic responsibilities, embrace a common set of values, participate in a democratic polity with a given set of rules, and embrace the economic, political and social life which constitute the foundation for the nation. All of this is necessary for an effectively functioning democracy, economy and society... At the same time, education must address the private interests of students and their families by providing a variety of forms of development which will enhance the individual, economic, social, cultural and political benefits of the individual... Embedded in the same educational experience are outcomes that can contribute to the overall society as well as those which can provide private gains to the individual."

Education provision, funding and regulation in much of the world were largely in the public domain until the 1970s. This, even as private institutions, especially faith-based organisations, had long been involved in education and human development. But the paradigm of the State as the primary provider of education came under serious challenge in the 1980s and 1990s in the developed world, with the advent of a reform agenda that involved the incorporation of the principles and practices of private business in the provision of public services for the ostensible reason of improving its efficiency, and the outright privatisation of public services in some cases. According to Leys (2003), "...state institutions were restructured with these main aims: to make the state serve business interests; to remodel its internal operations on business lines; and to reduce the Government's exposure to political pressures from the electorate". On the other hand, Kaul and Mendoza (2003) claim that decisions in the public sphere are no longer made by the state exclusively, but in interaction with citizens and civil society that have increased their engagement in public affairs, and businesses under pressure to act with social responsibility.

In the case of education, this reform programme involved, in practice, the opening up of public education services to private sector participation, and using the private sector to design, manage or deliver aspects of public education, with Governments in countries as diverse as the US, the Philippines, Columbia, New Zealand, Sweden and the UK, contracting out both core and non-core education services to non-state operators (Ball and Youdell, 2008). Ball and Youdell (*ibid*) characterise the entire reform agenda (in public education) as a privatisation agenda, with initiatives falling into one of the two categories of exogenous or endogenous privatisation. Endogenous privatisation involved the importing of ideas, techniques and practices from the private sector, in order to make the public sector more like businesses and more business-like. Exogenous privatisation involved the opening up of public education services to private sector participation, as described above. And according to the authors, the first type of privatisation typically paved the way for the second. The reform agenda, in its entirety, is predicated upon the idea of incorporating parental choice in education. This is facilitated by a combination of tools such as public funding of private provision to increase competition and choice, producing performance information on private and public providers to facilitate parental choice, and the deregulation of enrolment in schools allowing them to compete for students thus creating quasi markets (Ball and Youdell, 2008).

Carter O'Neill (1995) identified elements of a 'new orthodoxy' in education that represented a shift in the relationship between politics, government and education in Western countries. The

defining feature was the tightening of the connection between schooling, employment, productivity and trade to improve national economies, and the resultant focus of education on producing employment-related skills and competencies. Ball and Youdell (2008) claim that privatisation renders education into a form of 'commodity', a competitive private good for the benefit of the individual, and if anything beyond that, merely a 'good' that benefits employers and the economy.

To summarise, the elements of the education reform agenda in the developed world, during the 1980s and 1990s included (1) repurposing education to serve the economic competitiveness of the individual and her country in a global environment, (2) making parental choice central to the education ecosystem and fostering competition within and without the public school system to support and enhance such choice, and (3) the establishment of performance-based incentive systems for all participants in the ecosystem. This schema emanated from the increased policy influence of non-state actors and resulted in entrenching their influence in both policy and practice in the education sector. So much so, that the private sector is now involved in all domains of education: in policy making, brokering in new ideas that further embed the interests of the private sector, the colonisation of the infrastructures of policy and their global extension (Robertson and Verger, 2012).

The impetus for these changes to spread across the globe, was provided by the widespread prevalence of unfavorable public opinion towards big Government bureaucracies, as well as the increasing involvement of non-state (often economic) actors such as transnational corporations and international philanthropies. Multilateral development organisations including the United Nations (UN) organisations, and the Organisation for Economic Cooperation and Development (OECD), besides multilateral and bilateral aid agencies such as the IFC (International Finance Corporation)-World Bank, Asian Development Bank (ADB) and USAID (United States Agency for International Development) also supplied a further impetus through refocusing and reorienting their development stances to reflect the reform initiatives sweeping the developed world in the field of education.

OECD advanced the educational reform agenda involving devolution/decentralisation, institutional autonomy and parental choice in the developed world. According to Rizvi and Lingard (2006), "...the ideology of privatisation, the notion that services are best delivered by the private sector within a competitive market, has become something of a mantra within the

OECD. It has come to symbolise a new way of looking at public institutions and the role of the State in managing the affairs of its citizens".

With respect to developing and emerging economies, the notion that the private sector can and should be considered a partner in development emerged from the United States in the 1980s (Mitchell-Weaver and Manning,1991). Beginning in the 1980s and intensified during the 1990s onwards, a significant number of bilateral donors and multilateral aid agencies, USAID, DFID (Department for International Development, the UK), the European Union (EU), the World Bank and GTZ (German Agency for Technical Cooperation), joined in the chorus of praise for bringing 'non-state' actors to the table of discussions about how to improve education (Binder, Palenberg and Witt, 2007). Multilateral aid agencies such as the World Bank and the International Monetary Fund (IMF), also advanced what is often referred to as 'policy in a suitcase', as part of their Structural Adjustment Programmes (SAP) [Samoff,1994], and the policy repertoire in the case of education involved decentralisation, privatisation, user fees (charged by schools) and community financing, all of which tended to increase social polarity and inequality (Robertson and Verger, 2012 ).

The 1990 World 'Education For All' (EFA ) conference in Jomtien (Thailand), convened by the United Nations Development Programme ( UNDP), the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the United Nations Children's Fund (UNICEF) and the World Bank, in which end-of-decade EFA targets were set, explicitly mentioned the contribution of the private sector as an element of progress towards the EFA goals. The World Education Forum in Dakar (Senegal) in 2000, sponsored by the same group of global institutions, reiterated the commitment of the global community to the goal of EFA, and set a target date of 2015 to achieve the same. Once again, partnerships with non-state actors were considered a necessary element in achieving these goals. The United Nations Global Compact 2007 was established in 1999, as '...[a] strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the area of human rights, labor, environment and anti-corruption' (UN Global Compact, 2011). Enthusiasm for private sector involvement stemmed from a perception that governmental and inter-governmental action was possibly too slow, too inefficient and not cost-effective in achieving quality basic education for all in the developing world (Draxler, 2012). Major corporations were invited to adopt the UN Global Compact as part of their Corporate Social Responsibility (CSR) commitments, in cooperation with the UN (Bull,2010).

In 2001, USAID established the Global Development Alliance as a 'new strategic orientation and new business model for the 21st century.' This initiative was designed to 'align public resources with private capital, expertise and networks to deepen development impact...[The] Global Development Alliance Model of public private alliances welcomed private sector partners as full collaborators in the implementation, design and funding of development projects' (USAID, 2011, p.1, cited in Ginsburg, 2012). In its report entitled 'Public-Private Alliances for Transformational Development' (2006, p.16), USAID asserted that public-private alliances (i.e. partnerships) can attract foreign direct investment to developing countries by improving their business climate.

The World Economic Forum (WEF) launched its Global Education Initiative (GEI) in 2003, which aimed to 'utilize the strengths of the private sector, along with government and civil society, to support education reform. ' (WEF 2006, pp.27-28, cited in Ginsburg 2012).

Another strand of the global education debate relates to contrasting approaches to education, the market-based approach advocated by IFC-World Bank, which treats education as a service provided to consumers-students/parents, and the Rights-Based Approach (RBA) advocated by the UN bodies and is present in several international human rights treaties and conventions, where education is treated as a human right and a means to advance human rights. The most important international conventions in this regard include the Universal Declaration of Human Rights (UDHR, particularly Article 26), 1948, the International Covenant on Economic Social and Cultural Rights (ICESCR, Article 13), 1966 and the Committee on Economic Social and Cultural Rights General Comment No.13, (CESCR GC13), 1999, and the Convention on the Rights of the Child (CRC; Articles 28,29), 1989. Both the Jomtien and Dakar EFA declarations support this approach.

The (International) Convention on the Rights of the Child, CRC, 1989, Article 29 (1), sets out the aims of education as follows:

(a) The development of the child's personality, talents and mental and physical abilities to their fullest potential;

(b) The development of respect for human rights and fundamental freedoms, and for the principles enshrined in the Charter of the UN;

(c) The development of respect for the child's parents, his or her own cultural identity, language and values, for the national values of the country in which the child is living, the country from which he or she may originate, and for civilisations different from his/her own;

(d) The preparation of the child for responsible life in a free society, in the spirit of understanding, peace, tolerance, equality of sexes, and friendship among all peoples, ethnic, national and religious groups and persons of indigenous origin;

(e) The development of respect for the natural environment.

[Cited from EI, 2009]

If a State has committed to these international agreements/conventions and adopted national legislation to implement them, then in practice, it should ensure that education is provided in accordance with the rights-based approach (RBA). The RBA to education differentiates between delivering a service and enabling a right. It goes beyond the identification of beneficiaries, quantity and outcomes, and includes concepts of responsibility, quality and processes (Jonsson, 2003). The universal declarations cited above recognise the State as the main duty bearer and provider of education (CESCR GC13: Sub-section 48). However, given the encouragement of private participation in achieving the EFA goals by the UN bodies themselves, many countries find themselves in a situation where education is increasingly offered by multiple providers including non-state providers such as Non-Governmental Organisations (NGOs), private for-profit operators and via public private partnerships (PPPs) between the State and non-state actors. The role of the State in these situations is ambiguous in practice, although according to the various international conventions set out above, governments are obliged to respect, protect and fulfil the right to education, and have the duty to ensure that the education offered by different providers adheres to human rights standards and principles, promotes the full development of the human personality, effective participation in society, respect for human rights, tolerance and understanding with other groups. The State must also ensure that there is no discrimination by these entities on the basis of race, colour, gender, language, religion, political affiliation, national, ethnic or social origin, property, disability, birth or other status (CESCR GC13, Sub-sections 4,54; CRC Article 29; Ron-Balsera and Marphatia,2012).

The foregoing discussion is a reflection of the uncomfortable juxtaposition of elements of both the market-based approach and the rights-based approach to education, in the efforts of

international organisations to achieve the goal of universalisation of elementary education and related values of equity and inclusion, while courting the participation of both state and non-state actors in the journey.

Global developments in the education sector, thus far outlined, have indeed played a significant role in national education policies and practices, and thus constitute a useful backdrop to our study of the growing role of non-state actors in Indian pre-tertiary education. According to Sriprakash (2012): "Weaving through internal education debates in India were pressures from international development discourses and human rights agendas for the universalisation of primary education...In India, the 1990s saw significant national planning for the universalisation of elementary education and the emergence of new conditions for global development interests and public private partnerships in India's primary education system. The investments and agendas of international donor agencies visibly shaped educational priorities through the establishment of a number of time-bound target-driven intervention programs". However, it is important at the same time, not to overemphasise global policy influences on nation states. For instance, Rizvi and Lingard (2010, 97) maintain that while global influences play a significant role in driving national systems of education toward a similar policy outlook, '...the reforms which result always have a vernacular character as they build incrementally on what has gone before within specific education systems.'

The objective of this study is to examine the growing private sector footprint in the Indian pre-tertiary or K-12 education ecosystem, not just in terms of expanding operations but also in increasing policy influence, with a particular focus on developments in the past two decades. Our study will therefore encompass the role of non-state actors in both policies and practices of relevance to the K-12 sector. We begin with an outline of the Indian economic and human development status and a description of the country's K-12 education system (Section 2), and then proceed to a study of the evolution of the private schooling sector including the phenomenon of low-fee private schools (Section 3 ), public private partnerships in schooling (Section 4 ), the role of transnational philanthropy in shaping global education policy (Section 5), and finally, the emergence of online platforms for provision, support and evaluation of education, their contribution to the achievement of EFA, their influence on the processes of teaching and learning, and their bringing forth of yet another wave of non-state players as in the case of globalisation (Section 6). Section 7 concludes with a discussion of the tensions and the relative tenacity of the market-based and the rights-based approaches to education in the

Indian context, given the ever-expanding role of both global and domestic non-state actors in all domains of education.

## 2. Background: Indian economy, development and education system

India is a nation of 1.2 billion, with an average literacy rate of 74% (female literacy rate: 65%), according to the latest (2011) population census.

In 2017, it is forecast to record a nominal per capita GDP of US$1850, ranking 144 among 190 countries, and a per capita GDP calculated using the Purchasing Power Parity (PPP) method[1] of US $7150, ranking 140 out of 190 countries. The world average forecast for 2017 is US $10500 for nominal per capita GDP and US $17000 for per capita GDP (PPP). The United States per capita GDP (nominal/PPP) is US $60000, for comparison [IMF Outlook, April 2017].

In terms of human development, the UNDP Human Development Report (HDR), 2016, ranked India 131 out of 188 countries, with a human development index (HDI) value of 0.624 (World #1 Norway had a HDI value of 0.949). India's HDI value puts it in the medium human development category along with the Congo, Namibia and Pakistan. The UNDP also calculated an inequality-adjusted human development index (IHDI)[2], and according to its 2016 Human Development Report, India was ranked 97 out of 151 countries for which IHDI could be computed. It had an IHDI value of 0.454 (as against 0.796 for the 19th ranked US, and 0.898 for #1 Norway). Srilanka does far better than India; it is at rank 46 with an IHDI value of 0.678.

Inequality in human development in India is the highest in the education dimension. According to Suryanarayana, Agarwal and Prabhu (UNDP, India, 2011), who computed inequality-adjusted human development indices for Indian states, loss in HDI-education ranking score as a result of inequality was 43% in India, far higher than the global average of 28%. And inequality was most severe in regions characterised by low HDI values- the states of Uttar Pradesh and Rajasthan, further exacerbating the problem.

In a report titled "Inclusive Growth and Development Report 2015 ", released by the World Economic Forum (WEF), at the culmination of a two-year study, India fared dismally on income inequality, ranking 36/38 on social protection among middle income countries, and

[1] Per capita GDP (PPP) is the gross domestic product *converted to international dollars* using purchasing power parity rates (or adjusting for differences in prices in different countries), divided by the total population. An *international dollar* has the same purchasing power over GDP as a US dollar has in the United States.

[2] "The IHDI can be interpreted as the level of human development when inequality is accounted for." (UNDP Human Development Report, 2016)

24/33 on equity. On education, it ranked 29/38 on access, 31/36 on quality and 24/33 on equity. In terms of wealth inequality, the UN Global Compact (April 2017), ranked India second only to Russia, with the richest 1% of Indians owning 53% of the country's wealth.

India's population dividend based on the country's relatively youthful workforce is the talk of the moment. By the end of this decade, India will have 800 million people in the age group 20-65 years; that is the size of its potential labour force. According to the Population Census 2011, nearly 46% of the population was in the 15-40 age group. 280 million new job seekers are expected to enter the labour market by 2050 ("India to see severe shortage of jobs in the next 35 years", Live Mint, April 28, 2016). In order for India's much-touted demographic dividend to be realised, not only jobs but skills to match future jobs need to be created in the young population. Therefore, attention needs to be focused on the provision of quality education to the country's children and its youth, hailing from all sections of society, so they may have the opportunity and capability of becoming productive, fully participating citizens of the future. "India is already halfway through its demographic dividend, and taking full advantage requires a healthy and educated population" (Economic Survey, Government of India, 2015-16).

Education was exclusively a state subject in India until 1976 when it became the joint responsibility of the Centre and the states *via* the 42nd Amendment to the Indian Constitution. This has given rise to efforts to standardise the schooling structure across the country as 10 years of general education consisting of five years of primary education and three years of upper primary education, adding up to eight years of elementary education, and two years of secondary education. Two further years of education in specialised streams or higher secondary education completed pre-tertiary education.

In 1990, India was a signatory to the Jomtien declaration on the universalisation of elementary education (Education for All (EFA)). India was also a signatory to the Dakar framework for action on EFA (2000), and the UN Millennium Development Goals (MDGs) in 2000 which also included achievement of EFA and gender parity by 2015. Between 1994 and 2001, the District Primary Education Programme (DPEP) was the national programme tasked with the objective of achieving universalisation of elementary education. In the year 2001, Sarva Shiksha Abhiyan (SSA) was launched, which then replaced the DPEP as the flagship programme for achieving universalisation of elementary education in India. In the year 2002, the Government of India prepared a National Plan of Education detailing various programs and strategies to achieve the EFA goals by 2015. The most important development in this context

is the most recent one- the enactment of the Right of Children to Free and Compulsory Education (RTE) Act, 2009 (to give force to Article 21A inserted into the Indian Constitution *via* Amendment 86), that made free and compulsory education for all children 6-14 years old, a fundamental right. It is to be noted that the Constitution of India which came into effect in 1950, had directed that the State should provide free and compulsory education to all children up to the age of 14. At that time the national literacy rate was estimated to be 18.33% (8.86% for women) [Sriprakash, 2012].

200 million children are enrolled in India's elementary school system and another 60 million in its secondary school system. Overall, 55% of the children are enrolled in Government-run schools, 60% at the elementary level and 40% at the secondary level (UDISE[3] 2015-16, E&Y-FICCI Report 2014). While the joint efforts of the Government of India and the state governments to improve access to elementary education has resulted in enrolment in the upper nineties at the primary level, the average annual dropout rate is 4.13% at the primary level, 4.03% at the upper primary level and a whopping 17.06% at the secondary level (UDISE 2015-16).

Eight million children in India are reported to be out of school and these are mostly to be found among the socially weaker sections and those in the bottom expenditure quintiles in any geography. Socially marginalised groups like the scheduled castes and scheduled tribes still find schooling access relatively difficult due to various demand and supply-side factors; urban Muslims however fare the worst among any socio-economic group. Street children, children in urban slums, children of migrant families, working children, adolescent girls in rural areas and children with severe disabilities are predominant groups constituting out-of-school children (UNICEF-UNESCO Institute of Statistics (2014)).

[3] U-DISE or the Unified District Information System is a database maintained by the National University of Educational Planning and Administration (NUEPA) which contains information on school access and infrastructure, teachers and their qualifications, enrolment, attendance, dropouts and retention, covering all public, private and aided K-12 schools in every single rural and urban district in the country.

## 3. Private School Sector

### 3.1 The Evolving Private Schooling Landscape in India

"An institution is classified as private if it is controlled and managed by a non-governmental organisation (eg. Church, trade union, business enterprise etc.), or if its governing board consists mostly of members not selected by a public agency...The most common definition of a private school is one that is not managed by a state or public authority". Kitaeu (2007)

In India, at the pre-tertiary level, Government schools are those run by the Central, State or Local Governments, an overwhelming majority being run by state governments. Private schools operating at the pre-tertiary levels (primary/upper primary/secondary/higher secondary), fall into two major categories: aided and unaided schools. Aided schools are schools under private management that are funded to a substantial extent by the concerned state governments. Unaided schools fall into the residual category, and they correspond to what are known as "independent schools" the world over. Certain researchers like Kingdon (2008) considered aided schools to be government schools for all practical purposes, given the unionisation and direct recruitment/payment of the aided school teachers by the concerned state governments resulting in a very similar environment in aided schools as in Government schools. But others (eg. Desai et al., 2008) include them as private schools. It must be noted that the level of autonomy in operations enjoyed by aided schools varies from state to state. There is also a very large number of unrecognised schools operating in the private sector; we shall discuss this at length in the following section. Religious schools such as Madrasas form yet another category.

Private schools represent 25% of the K-12 schools in India, and they enroll 43% of the student population or about 100 million students. Their dominance is especially pronounced when we consider secondary education; 60% of the secondary (Standards IX-XII) schools are under private management and they enroll 57% of students in these grades. Overall, during the fifteen-year period since the turn of the millennium, one lakh new secondary schools came into being enrolling 32 million additional students (GOI, MHRD-NUEPA[4], 2014). The private sector made a major contribution to this expansion, in the wake of the demand created across

[4] NUEPA is the National University of Educational Planning and Administration, New Delhi.

MHRD is the Ministry of Human Resource Development, Government of India.

the country by the Government's initiative to universalise elementary education. The private sector was also increasing its footprint at the elementary level in tandem with the ongoing initiatives of the Government of India such as the DPEP and the SSA. Access to elementary education improved due to these enormous Government initiatives to create school infrastructure, and consequently elementary enrolment. 1.6 lakh new schools were opened under DPEP, and under SSA since its inception in 2000-01 until 2013-14, over 2 lakh new primary schools and over 1.5 lakh new upper primary schools were built, besides 16 lakh additional classrooms. The overall increase in upper primary schools was 185%, an increase of nearly 4 lakh schools, pointing to a simultaneous ramping up outside the SSA programme, by the States and/or the private sector. Elementary enrolment in private unaided schools as a proportion of total elementary enrolment rose from 10% in 1996 to 28% in 2005. Curiously, between 2007 and 2013, while overall elementary enrolment peaked, and upper primary enrolment alone grew by as much as 15 million, enrolment in Government elementary schools declined by about 12 million and private enrolment increased by 27 million (DISE[5]). On closer examination, we find that private aided elementary schools that received grants-in-aid from the concerned State Governments grew by nearly 70000 just between 2006-07 and 2010-11 (E&Y-FICCI, 2014), enrolling around 17 million students. Aided schools, traditionally, were secondary or higher secondary schools, there were a few at the upper primary level and almost none at the primary level. But during the above-mentioned period, there was growth in the number of aided schools, both at the primary and upper primary levels. Typically, in the case of aided schools, the concerned state government funded all teacher costs, which constituted over 90% of the operational costs. Hence this expansion too was State-funded. Nevertheless, the private sector imprint is unmistakable today as of the 200 million elementary school students in the country, 39% are enrolled in private schools, 34% in private unaided schools. Out of the 1.45 million elementary schools, private schools constitute 22% or 320000 (DISE 2013-14; UDISE 2015-16). Their increasing footprint was not limited to urban areas, but also extended to rural India. The annual cross-country household education survey conducted by the NGO Pratham Foundation, has found that private elementary enrolment in rural areas rose from 18.7% in 2007 to 30.5% in 2016 (ASER[6] 2016). Urban private enrolment at the

[5] DISE or the District Information System for Education was launched in 2002-03 by NUEPA, as a database covering elementary schools across the country. Recently, since 2015-16, it has been integrated into U-DISE along with the Secondary Education Management Information System (SEMIS) which also pre-dated U-DISE.

[6] ASER is the Annual Status of Education Report, released annually since 2005 by the non-governmental organisation (NGO) Pratham Foundation, based on a national household survey incorporating a rapid assessment of children's abilities in basic reading and arithmetic.

elementary level had always been high; even in 2005 it was 58% (Indian Human Development Survey (IHDS)[7]2005, cited in Desai et al, 2008).

According to ASER 2016, the highest private rural elementary enrolment was found in the Indian states of Kerala, Haryana, Punjab and Uttar Pradesh, at around 50-55%, and the lowest in Odisha, West Bengal, Bihar and Gujarat. Several states such as Maharashtra, Himachal Pradesh, Rajasthan, Telengana, Andhra Pradesh and Tamilnadu had significant private rural enrolment of 30-40%, of children 6-14 years of age. Overall, country-wide, 32% of the rural children 7-10 years old (primary school years), 29% of the rural children 11-14 years of age (upper primary years), and 28% of the rural youth 15-16 years of age (secondary years), were in private schools (ASER 2016). 85% of the elementary schools in the country and 74% of elementary enrolment are in rural areas. 68% of the 250000 secondary schools in the country are also in rural districts. (DISE 2013-14, UDISE 2015-16).

At the secondary level, the state of Maharashtra had the largest number of private schools (rural+urban), 18000, followed by Uttar Pradesh (17000), Andhra Pradesh (12000), Rajasthan (11000) and Karnataka (10500). Andhra Pradesh and Rajasthan also had a matching number of public schools unlike Maharashtra and Uttar Pradesh where there was a negligible number of Government schools. Even with smaller numbers, Gujarat and West Bengal secondary schools were nearly all private (in contrast to the dominance of the government sector at the elementary level for both states). Kerala had a total of 4000 secondary schools, but there were three times more private schools than public schools. It is notable that most of the 'private' schools in Kerala are aided schools. (E&Y-FICCI, 2014)

### 3.2 Low-fee Private Schools

**3.21** ***What are low-fee private schools:*** The phenomenon of low-fee private (LFP) schools or low-cost private schools (or budget schools), touted as the means to improve access to quality education for the poor, appeared to capture everyone's imagination and attention in the early half of the last decade. These budget schools in India initially offered basic education to the masses at a monthly fee of Rs.100-Rs.200. But they were unable to sustain their operations even in the most bare-bones version, and there was considerable churn in the early days with

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[7] The Indian Human Development Survey (IHDS), 2005, was organised jointly by the University of Maryland and the National Council of Applied Economic Research (NCAER) and funded by the United States' National Institute of Health (NIH). It was a nationally representative survey of 41554 households located in both urban and rural areas across 33 states and union territories.

many going out of business in short order. The major players altered their business model to shift their target towards middle-class households and away from the poorest and the most underprivileged sections of society.

Major players in the emergence of the low cost private school sector in India include first and foremost, Professor James Tooley (formerly of Newcastle University), the principal evangelist for low-fee private schools, and a partner in Empathy Learning Systems, an Education Service Provider to budget schools that helps them enhance the quality of teaching and improve learning outcomes through a low-cost teacher training model. 'Para skilling' teachers, a cornerstone of Tooley's low cost teacher training programme, is considered an important aspect of a successful budget school model. Para-skilling involves disaggregating complex processes into simple, routine and standardised tasks. Para-skilling teachers is aimed at ensuring uniform quality and addressing the problem of frequent attrition of extremely low-paid teachers by essentially making individual teachers less relevant and easily replaced. "'Para skilling' that is being acclaimed as a model for training of teachers in low cost schools, is merely the 'drilling' of young people to perform the role of 'less skilled workers' who will transact a narrow set of skills- standardised, homogenised and mechanical skills that do not provide a meaningful and holistic education for children" (Nambissan, 2012).

Another player in the low cost private schooling segment in India, was Richard Chandler of Oriental Global, Singapore, who, in 2007, set up a $100 million education fund with Prof.Tooley as the director, to target markets for private schooling for low-income families. He established the Rumi schools of excellence in India, in 2008, along with James Tooley and Mohammed Anwar, Tooley's partner in Empathy. Rumi's schools of excellence targeted the upper segment of the low-cost school market, known as the Affordable School market, providing services like teacher training, lesson plans, and computer literacy support and school management to partner schools. While Empathy catered to schools in the Rs.100-Rs.400 bracket (monthly fee), Rumi catered to the Rs.700-Rs.2000 segment.

SONG Investment Company, jointly owned by Soros Economic Development Fund, the Omidyar Networks and Google (now Alphabet), in 2010, invested in a chain of Affordable Private Schools in Andhra Pradesh and saw potential for investing at the Rs.2000-Rs.3000 fee slab in Indian K-12 schools (Garg, 2011).

As these major chains and education service providers pivoted to creamier segments, those schools which remained at the lower fee slabs tended to survive in the grey market outside the regulatory net.

Proponents of budget schools often point to the complex regulatory framework in India as the principal cause for the failure of the low-cost business model here, in its quest to benefit the truly underprivileged. SONG Investment has made it plain that regulatory compliance costs in India made schools charging fees less than $30 per month unviable. Another sticking point is the requirement for schools to be registered as non-profit trusts/societies. Many schools in India do get around this condition that constrains their ability to generate and distribute profits, by honoring bills raised by 'friendly' education service providers in connection with a variety of services rendered. In Ghana, where Prof.James Tooley is a partner in yet another enterprise running a chain of budget schools called Omega schools, private schools are permitted to be organised as for-profits.

The hallmark of Omega and other budget school chains such as Bridge International Academies, Kenya, is ***the standardised provision of education at multiple locations with standardised deliverables that can be measured and compared to facilitate stringent quality control and returns to scale.*** The proponents of this model maintain that the key to successful scaling is standardisation as it leads to easier (economical) replicability, and that the more rigorous the governance and monitoring, the smoother the delivery and 'consistency' in teaching quality.

[Garg, 2011].

Bridge International Academies opened its first academy in Kenya in 2009, launching a business model consisting of a chain of for-profit low-cost private schools, made up of barebones local units supported by a strong central headquarters. Based on a "school in a box" concept, all the schools were highly standardised and virtually identical with tightly scripted daily class plans capable of being taught by teachers with a secondary school education and run by school managers under a franchise-like arrangement. Each student paid a tuition fee of $7 per month. By year-end 2014, there were 358 Bridge Academies in rural and urban Kenya with over 100000 pupils enrolled from pre-school to Grade 8, making it the largest school chain not just in Kenya but in all of Africa. The school chain was expected to become profitable once it reached 300000 enrolments. Major investors in the venture included the International Finance Corporation (IFC- World Bank), Pearson (the world's largest publishing and Education

Company), the Omidyar Networks, Khosla Ventures and the UK's Development Finance Institution. Pearson invested USD 8 million in Bridge Academies via US-based venture capital firm Learn Capital.

(Kasturi and Lee, 2013; Chu, Dessain and Maslauskaite, 2015: HBS Cases).

As for James Tooley's Omega Schools in Ghana, two schools were opened in 2009 and a third in 2010, each charging a daily fee that included not only tuition but all other schooling expenses such as two uniforms, books, a daily lunch, transportation and access to a computer lab. Cost of schooling was estimated at $100 a year per pupil and fees were set to include a small profit margin and charged daily, represented by daily vouchers children could use for entry. The school had nine grades starting with nursery. Omega students were assessed in English, mathematics and science six times a year from the Omega headquarters, and once a year by an independent examiner. At ten schools and 6000 children, Omega broke even. (http://www.omega-schools.com ; cf Chu *et al.*, 2015)

Pearson Affordable Learning Fund (PALF), established by Pearson as an in-house venture capital fund with $15 million in 2012, invested $2.4 million for a 44% stake in Omega in the same year. Katelyn Donnelly, Managing Director, PALF, explained PALF's strategy of acquiring substantial minority stakes thus: "We want to partner with entrepreneurs who see the strategic benefit of working with Pearson and we want to be able to shape the strategic direction of these ventures. We can only make this relationship work when we have a significant (yet minority) equity and at least one board seat".

(Chu, Dessain and Maslauskaite, 2015)

Pearson Affordable Learning Fund (PALF) was set up by Pearson with a remit to invest in business models providing superior educational outcomes in emerging markets to base of the pyramid (BOP) students on a profitable and scalable basis. Pearson considered PALF to be in alignment with its own shifting business strategy from the developed to the developing world, and from a supplier of books to a host of learning products and services and the direct delivery of education. Between 2007 and 2013, under the guidance of Dame Marjorie Scardino, Pearson's CEO between 1997 and 2013, the company's revenues from emerging markets tripled (Pearson Annual Report, 2013). By 2013, Pearson had already become the largest publishing group in the world, ahead of Reed Elsevier and Thomson Reuters (Wischenbart, 2013), and also the global leader in education, with a £5 billion turnover, net income of £535 million,

40000 employees and a presence in more than 70 countries (Pearson Annual Report 2013; cf Chu *et al.*, 2015).

Dame Marjorie had been inspired by the ideas of Prof.C.K.Prahlad, a Pearson Board member from 2008 to 2010, and the author of "Fortune at the Bottom of the Pyramid", who advocated for private provision of education to low-income populations of developing countries. The underfunding of education by Governments worldwide, especially post the 2008 recession, despite their pledge to the Millennium Development Goal of Education for All, was seen as an opportunity by Pearson (as also by the IFC) for private provision of education to BOP populations around the world. Pearson considered it both a business opportunity as well as a way to accomplish the corporate mission of improving people's lives through learning. According to Katelyn Donnelly, Managing Director of PALF: " In ten years we are hoping to impact at least a million learners worldwide, to make market-based returns on our investments, and to use our fund to prove that the private sector has an important role to play in solving the challenges of education in the developing world". In her presentation of 'Lessons Learned', to the PALF Investment Committee in 2014, Donnelly emphasised the need to constantly focus on costs to make the budget school model work: "Working with low-income populations requires a focus on local costs and incentives. Affordable education companies must be more vigilant in balancing the benefits of each education initiative against the costs of delivery. Continuous reprioritization is necessary to maximize the ROI on each dollar - because the target customers in this sphere simply cannot afford to pay more". [ Chu, Dessain and Maslauskaite; HBS Cases, 2015]

The vital importance of Government regulatory policy to the survival of the low-cost or budget private schools was also highlighted by Katelyn Donnelly, Managing Director, Pearson Affordable Learning Fund (PALF): " Ultimately, if low cost private schools and education technologies are going to be scalable and take off, they will need to be embedded in the national systems, but governments are often influenced by aid agencies and NGOs. Government regulatory regimes have huge market implications...".

Another major investor in budget schools, the International Finance Corporation (IFC) which is a part of the World Bank, positions itself as a contributor to the World Bank's poverty reduction mandate to reach those at the bottom of the pyramid, and it promotes its financing of private K-12 schools, with an emphasis on its targeting of low-fee private schools (those charging US$50-60 per term), as a major contribution in this regard. An education strategy

paper published by the World Bank, "Education Sector Strategy 2020" (World Bank, 2011, p.32), reiterates IFC's contributions to the Bank's poverty mandate, and sets out IFC's goals in education thus: "To provide financing for larger network providers who have the ability to invest across borders and go down-market to reach poorer populations; financing for education to small and medium enterprises which typically target poor populations and to students through partner banks; and advisory services to companies to support quality of education and to banks to ensure responsible lending to the sector".

However, according to a World Bank's own impact evaluation, schools funded by the IFC in Africa (under the Africa Schools Program) charged as much as US $275 per term (Mundy and Menashy, 2012). Even the IFC-reported fees are unaffordable, according to many studies, to the low-income populations in the countries served. Some studies in Africa find that low-fee private schooling costs take up as much as 30% of the household income (Srivastava, 2013). A 2011 Report of the World Bank's Independent Evaluation Group (IEG), suggests that individual IFC investments pay limited attention to poverty and distributional issues either in their design or in their performance outcome measures, and concludes, "...most IFC investment projects generate satisfactory economic returns but do not provide evidence of identifiable opportunities for the poor" ( IEG, World Bank, 2011, p.6).

For context, in 2015, 58 million children around the world did not attend school, and 100 million did not finish primary school (UNESCO 2015 - "Education for All: 2000-2015"). It is notable that 2015 was set as the deadline in 2000 for the fulfillment of the goal of universalisation of elementary education or EFA. However, UNESCO, a co-sponsor of both the Jomtien and Dakar EFA frameworks, did not consider low cost private schools a solution to this problem, but rather a symptom of failure in the public provision of education, with millions of children still out of school "because many countries are not able to provide adequate services for their population and continue to allow school fees and other costs that discourage attendance" (UNESCO, "Education for All: Global Monitoring Report 2009- Overcoming Inequality: Why Governance Matters").

**3.22 *Quality of Educational Inputs in LFP Schools*:** To provide context to the plea for light-touch regulation and relaxation of input norms by proponents of budget schools in India, it is important to consider the actual conditions found in several low fee private schools across the country by education researchers. According to Garg (2011), infrastructure in these schools was basic- buildings constructed with average, sometimes harmful, material, maintenance only

when absolutely necessary, sometimes no electricity, sometimes no furniture. The infrastructure norms which now apply to all schools under the Right to Education Act (RTE), 2009, are meant to ensure a reasonably healthy and conducive learning environment for children. While a school may indeed find minimum land requirements too onerous, especially in regions where land is scarce or prohibitively expensive, stipulations for land ownership or long leases are usually made to elicit a commitment to the project. The reason for this is that children may experience unnecessary disruptions in their studies if schools are able to wind up operations with little or no notice, which they will be loath to do after committing an appreciable amount of capital. Harma (2011) in her study of low fee private schools in UP did see some of her sample schools close down during the course of her study, and others in a precarious financial situation and on the verge of closing down. De *et al*. (2002), spoke of small-fee private schools they had surveyed in 1999, in the states of Haryana, Uttar Pradesh and Rajasthan: "We came across a schooling situation of great fluidity: entrepreneurs wooing poor parents, schools breaking up or closing down because of manipulation among this group or because of oversupply..."

Teachers in low cost private schools were usually high school or secondary school graduates with no training in teaching. They were paid between Rs.400-Rs.2000 a month (or 10-15% of what government school teachers were paid at the time). According to Nambissan (2012), only around 30-35% of these teachers had even completed secondary school. They certainly did not possess government-mandated qualifications. Teachers were not even proficient in English, while English language teaching was the most important selling proposition for many of these schools.

***3.23 Equity of Access in LFP Schools:*** The contention of proponents of low fee private schools that millions of disadvantaged children/youth would be denied access to education of their 'choice' in their absence, as a rationale for their continued operation with relatively few controls, has been repeatedly called into question. In a survey of 120000 households across eight states, Mehrotra and Panchmukhi (2006) found that private unaided schools did not seem to favor gender or caste-based equity in enrolment. Joanna Harma's study (2011) of low fee private schools in Uttar Pradesh found that 68% of the children enrolled in these schools were from Hindu non-scheduled castes and only 30% were lower caste Hindu or Muslim children. Also, only a third of the children of unskilled workers were enrolled here, even as 55% of farmers' children and 75% of skilled workers' children were enrolled in these schools. Children from the poorest households were more likely to be enrolled in government schools, if they are

enrolled at all, as these schools were not only free of fees but in addition, also provided free uniforms, books and midday meals. Private school costs, meanwhile, including tuition fees, books and stationery, uniforms and transportation and private tuition could quickly add up to as much as Rs.1800 per month (Desai *et al.*, 2008).

Tooley and Dixon (2005) claimed that "...roughly equal numbers of boys and girls attend private unaided schools, which have better pupil-teacher ratios, higher teacher commitment, and sometimes better facilities than government schools". Whereas, Harma (2010) maintained that fee-paying schools, even low fee private schools discriminate, "leaving behind those of low caste or minority religion, the landless, girls, and children born later in families and children of larger families...Marketised options are neither sustainable in the context of remote rural villages, nor are they, most importantly, socially equitable". While Tooley (2001) claimed that the success of budget schools was related to 'parental choice' and greater accountability to fee-paying 'consumers', Harma and Rose (2012) provided a more realistic perspective of 'parental choice': "Where poor households are paying for education at LFPs (low fee private schools) due to the low quality of government schooling available, this can either be perceived as a market preference freely expressed, or as an act imposed by policy failures that leave poor households with two stark options: paying for education through severe sacrifices in other areas, or accepting that their children have no opportunity for an education meeting minimum quality standards".

### 3.3 Regulation of Private Schools

According to some reports there are nearly 400000 unrecognised schools across the country[8], in which 4.7 million students are enrolled[9] (the official school database, U-DISE, reports far less). Srivastava (2008) describes these schools thus: "...these (unrecognised private schools) operate in an amorphous policy space following a set of 'shadow institutions' comprised of informal norms and practices often in contravention of the official regulatory framework". The official regulatory framework can be quite onerous, as reported by Kingdon (2008). Kingdon described the conditions for recognition of a private school in the state of Uttar Pradesh: to register as a society, to have owned not rented building, to employ only trained teachers, to pay

[8] The Indian School Finance Company (2011) and ASER (2010) are cited as sources in Garg (2011).
[9] Chavan, Madhav (2015), "Looking back and looking ahead", in ASER 2014.

salaries to staff according to Government prescribed norms, to have classrooms of prescribed minimum size and to charge only Government-set fee rates.

School fees charged by private schools, including unaided private schools, are also regulated in several states. In the state of Tamilnadu, the Tamilnadu Schools (Regulation of Collection of Fee) Act, 2009, governs fees charged by Government-aided and private schools. Under the legislation, private unaided schools must have their fee structures approved by a Government fee regulatory committee headed by a High Court Judge, based on factors like location, available infrastructure, administration and maintenance expenses, reasonable surplus required for growth and development of the school, and student strength. In Andhra Pradesh, fees are independently fixed by the governing body of the institution, but there are strictures on how they are to be employed: (i) 50% for salaries, (ii) 15% for development, (iii) 15% for rent and utilities, (iv) 15% as contribution to staff welfare, and (v) 5% for management. According to the Maharashtra Educational Institutions (Regulation of Collection of Fee) Act, 2011, private schools are required to constitute an Executive Committee with representatives of parents and teachers, to which the proposed fee structure needs to be submitted and be approved [E&Y-FICCI, 2014].

Wherever the regulatory initiatives of state governments are considered inadequate to protect the public interest, the state high courts have also been requiring the government to evolve a regulatory mechanism as in the case of Patna High Court direction to the Bihar Government on March 17, 2017, with respect to fees charged by private schools in the State. The Patna High Court, in this case, allowed the Bihar Government six weeks to submit a report on what it proposed for the regulation of fee structures in private schools, pursuant to which, the Government formed a committee on April 1, 2017 to study the fee structures (Times of India, April 2, 2017).

The RTE (Right to Education) Act, 2009, has stipulated several stringent input quality norms for private schools seeking recognition. The Act lays down norms with respect to pupil-teacher ratio, school building and infrastructure, teacher qualifications, training and working hours (GOI, MHRD-NUEPA, 2014).

In a report on private sector's contribution to K-12 education in India (E&Y-FICCI, 2014), the authors have this to say about the complex regulatory framework for schools in India: "Private players are facing challenges in setting up and operating schools. From a regulatory perspective in particular, schools are allowed to be set up either by the central/state/local government or

the private sector by establishing a trust/society. There are strict norms around infrastructure and other facilities, process of application, registration as a society/trust to obtain the land, procurement of multiple licences and numerous certificates to establish a school. To be a recognised school today, it has to be affiliated to a board. However, there are multiple boards (CBSE/ICSE/State boards) that regulate and recognise schools with inconsistency in norms across states and affiliating bodies. Additionally, strict RTE norms by the Government, inadequate and delayed compensation by the Government for the 25% EWS (reservation for the Economically Weaker Sections[10]) under RTE are forcing existing and performing private schools to close down...High level costs, unavailability of land, high teacher salaries and 25% reservation for EWS impact the viability of schools".

Recognition requirements of state governments and affiliating boards such as CBSE and state education boards typically relate to (i) entity format (registered society/trust/Section 25 company), (ii) minimum land and infrastructure requirements often with detailed norms for built-up infrastructure, (iii) teacher strength, qualifications and salaries, (iv) chargeable fee structure, and (v) prescriptions for more dispersed (less concentrated) management. The main thrust of the criticism of this regulatory framework by proponents of private sector involvement in education, including through operation of low-fee schools, is that it tends to emphasise input norms over outcomes of education. The argument goes that the land and infrastructure norms lead to high initial capital costs, the teacher qualification and salary norms lead to high operational costs, and state control over fee structures and admission procedures restricts operational flexibility, rendering the business model for low-fee schools as detailed in the previous section unsustainable. The RTE input norms, are considered especially onerous. The 2014 E&Y-FICCI report points to the number of budget schools that face closure due to non-compliance with RTE norms: over 1000 schools each in Punjab and Haryana, and over 6000 schools across Tamilnadu, Uttar Pradesh, Andhra Pradesh, Maharashtra and Delhi. The authors claimed that this could lead to denial of access to 1.8 million children to their 'chosen' schools. The main elements of regulatory reform sought for, include (a) movement from input-based to outcome-based norms such as graduation/retention, performance in board exams and independent assessments and measures of 'curricular effectiveness', (b)pooling of government and private resources including infrastructure, (c) relaxation of minimum land requirement as has already been implemented in Andhra Pradesh, Karnataka and Maharashtra, and/or

[10] The Right to Education Act, 2009, imposes an obligation on all private schools, including unaided private schools to reserve 25% of the available seats (in Standard I), for children belonging to weaker sections of society, who are to be admitted free of costs/conditions, however compensated by the concerned Government on the basis of a stipulated formula.

provision of subsidised land, (d) relaxation of norms relating to entity format, especially allowing registration as a Section 25 company able to operate across state lines, (e) limits on state control over fee structures, admission procedures and teachers' salaries. As regards the last, the report points to this excerpt from the Twelfth Five Year Plan document: "If the minimum standards, teacher qualifications and other norms are met, the market should be allowed to determine the compensation structure of teaching and non-teaching staff in schools".

### 3.4 Private school effect on learning outcomes

In their foreword to the E&Y-FICCI report on the contribution of the private sector to K-12 education in India, members of the FICCI School Education Committee wrote thus: "...Majority of private schools deliver higher quality education as gauged by educational outcomes such as performance on board exams and evidence from standardised assessments. Private schools are also operationally more efficient and perform better on indicators such as student attendance and instructional time in the classroom. Yet, private schools face several financial and operational challenges such as complex regulatory frameworks, high infrastructure costs and limited autonomy". Such assertions of the superiority of the performance of private school students over their public-school peers are often made with a certitude not borne by evidence. While students in private schools, on average, seem to perform much better than their public-school peers, the gap reduces substantially when the (demographic) characteristics of the children and their households that lead to private enrolment in the first place, are controlled for.

Wadhwa (2015) found that between 2010 and 2013, learning levels had plummeted to such an extent in government schools that the learning gap between them and private schools doubled; but on further examination, she found that once child characteristics were controlled for, the learning gap fell by 72%. In states like Punjab, Gujarat, Maharashtra, Andhra Pradesh and Karnataka, the learning gap was even reversed when parental and household factors were controlled for.

Desai et al. (2008) who used data gathered as part of an extensive nationally representative Indian Human Development Survey (IHDS), 2005, found a modest private school performance advantage in foundational reading and arithmetic tests, which was however subject to wide inter-state variations. Controlling for student demographics, Government school students in states as diverse as Kerala, Himachal Pradesh, Chattisgarh and West Bengal, performed at a higher level than private school students in other states. Interestingly within some states with

large private sector enrolment, like Tamilnadu and Haryana, Government school students did better than their private school peers, making it hard to decipher the results. Private school advantage seemed to be located in states like Bihar, Uttar Pradesh, Uttarkhand and Madhya Pradesh, states known for poorly functioning public institutions as well as being the poorest states. Chudgar and Quin (2012), who also used the same IHDS dataset to estimate the private school effect on achievement, further made an attempt to distinguish between low-fee private schools and other private schools in their sample, and they found that children in low-fee private schools performed no better than their government school counterparts. Singh (2014) studied relative school quality and student achievement in private and public schools in his Young Lives Project sample of 247 schools comprising both rural and urban schools in Andhra Pradesh, using a longitudinal analysis that involved following two age cohorts of 1000 and 2000 children respectively through their primary and secondary school stages. He found no private school effect on achievement in urban schools. 8-10 year old rural students in private schools performed substantially better than their public school peers in English, moderately better in receptive vocabulary, and no worse in mathematics. 15 year-old rural children in private schools significantly outperformed their government school counterparts in mathematics, receptive vocabulary and language, but the effect sizes were small, about 20-40% of the raw premium in test scores. Singh's Young Lives sample was a stratified sample that had recognised/unrecognised strata within private schools, but the published work did not report results for private schools disaggregated in this manner, as did Chudgar and Quin (2012).

To conclude, while there appear to be some gains from private schooling, they arise largely due to self-selection of households better equipped to support their children's education in every way, and whatever gains remain after controlling for these extraneous factors are too small to support a policy for a large-scale shift of students to private schools. The relative gains also vary across states and regions. And the less than stellar record of private schools on the matter of access to weaker sections of the society, argues for the strengthening of public provision rather than otherwise.

### 3.5 Increasing demand for private inputs

While there are doubts over the ability of private schools to improve the learning ability of students from all sections of society including those who are first generation learners, one cannot ignore the growing demand for private inputs by parents, even in poorer households in rural areas, as evidenced by the increase in private school enrolment to 30% in rural areas and

the added dimension of private tuition sought by nearly a quarter of the rural households (ASER 2014/2016). This trend not only reflects the disenchantment of rural parents with the quality of education in government schools but also their notions of upward mobility that government schools generally ignore, especially the learning of English at an early age and the advantages this imparts to the child. Many studies have found labor market advantages to learning English at an early age (Azam, Chin and Prakash,2013; Munshi and Rosenzweig, 2006; Chakraborty and Bakshi, 2012; Aslam et al.,2010). Municipal school systems in Mumbai, Chennai, Pune and Bangalore, that have introduced English medium schools have seen rising enrolment in these schools despite overall trends of declining enrolment in government schools (CSF-FICCI,2014: Report on Public Private Partnerships in school education).

### 3.6 Influence of private actors on regulatory and other policy matters relating to schooling

The argument for less regulation from private sector proponents, seemed to find favour with the Government of India, as may be seen from remarks in several policy documents since 2000. The Tenth Five Year Plan (2002-2007) Approach Paper had the following comment: "Laws, rules and procedures for private, cooperative and NPO (Non-profit Organisation) supply of education must be modernised and simplified so that honest and sincere individuals and organisations can set up universities, colleges and schools. ***Oppressive control on fees, teacher salaries, infrastructure and staff strength must be eliminated*** (Planning Commission, 2001:38; emphasis added). Again, during the Eleventh Plan (2007-2012), according to Srivastava (2010), an adoption of privatisation as a preferred strategy for education was clearly visible, despite the recognition that the ultra-poor were largely excluded from private schools. "In the liberalised global economy where there is a pursuit for achieving excellence, the legitimate role of private providers of quality education not only needs to be recognised but also encouraged" (Planning Commission, 2008:8). As Srivastava (2010) observed, the Government was well aware of the poor record of the private sector on the matter of access to the weaker sections. This may be gleaned from the following comment: "...there is ... no evidence to show that enrolments in these schools are additional. Only those who can afford to pay apparently opt for these schools and their average enrolment is much lower than that in aided and Government schools" (Planning Commission, 2008:15).

Another noteworthy development is that the Government of India has steadily, over the years, come under the influence of the learning outcome brigade which has the NGO Pratham in the bandwagon. The Annual Status of Education Report (ASER), based on a massive country-wide household survey, has been published for every year (except 2015) since 2005, and it has showcased poor learning and woefully low foundational skills in reading and arithmetic in rural India, in every one of these reports. Policy entrepreneurs for privatisation and international consulting firms have continuously lobbied over the last two decades for a shift from inputs into education to outcomes. The language prominently figured in the Twelfth Five Year Plan document (GOI, 2007): "Improving learning outcomes is crucial for inclusive growth, and therefore, a major focus of the Twelfth Plan will be on measuring and improving learning outcomes for all children, with a clear recognition that increasing inputs (number of schools, classrooms, teachers and so on) will by themselves not be enough to ensure quality education for all children". It is however not clear what this means in practical terms. Apart from ASER (Annual Status of Education Report), which tests foundational skills of children in rural districts across the country, large scale assessments at the national or state level are infrequent and rare. The National Council of Educational Research and Training (NCERT) conducts nation-wide National Achievement Surveys (NAS) of children at grades 3,5 and 8, once in every four years; only in the recent cycle have these surveys shifted to internationally accepted IRT-based assessment techniques, rendering previous datasets unreliable and furthermore not comparable to more recent ones. Performance measurement and outcome-based rewards and penalties are confined largely to public private partnerships in various states for the provision of core education services.

We now proceed to discuss the phenomenon of public private partnerships in education, and how it has assumed significance in India in the past two decades in the context of a global push to achieve universalisation of elementary education and the important role of partnerships in this quest.

## 4. Public-Private Partnerships

### 4.1 Emergence of Public-Private Partnerships (PPP) in Global Education

PPPs in education (ePPPs) have emerged since the 1990s as a primary mechanism for embedding the private sector in public education systems worldwide.

"In the field of international development, different decades seem to usher in new champions of change: the developmental state in the 1960s and the 1970s, free market forces and non-governmental organizations in the 1980s and 1990s. The new millenium has offered up a hybrid variant of public-private partnerships (PPPs)...partnership has become a mobilizing term implying all manner of desirable objectives can be achieved" (Utting and Zammit, 2006, p.1).

A generic definition of PPP is "...cooperation of some sort of durability between public and private actors, in which they jointly develop products and services and share risks, costs and resources which are connected with these products" (Hodge, Greve and Boardman, 2010, p.4).

As for PPPs in education or ePPPs, the most cited definition is the one by Patrinos et al. (World Bank, 2009) which uses contracting language:

"...government guides policy and provides financing while the private sector delivers education services to students. In particular, governments contract out to private providers to supply a specified service of a defined quantity and quality at an agreed price for a specific period of time. These contracts contain rewards and sanctions in which the private sector shares the financial risk in the delivery of public services".

Newman (2001) considered partnerships as another form of privatisation: "Partnerships emerged in the early 1990s promising to smooth over the damage done by earlier forms of privatization whilst not abandoning them. Most importantly, partnerships enabled multiple framings, multiple interests, multiple objectives to be realized."

Hodge and Greve (2007, pp.546-47) concur: "...the language of PPPs...is a game designed to 'cloud' other strategies and purposes. One such purpose is privatization and the encouragement of private providers to supply public services at the expense of public organizations themselves". Linder (1991, p.41) also states that PPPs 'seem to offer palliative, less prickly, form of packaging around the contents of government's shifting functions to commercial enterprises."

UNESCO and the World Economic Forum (WEF) prefer to use the expression 'Multi-Stakeholder Partnerships' (MSP) that are defined as the 'pooling and managing of resources, as well as the mobilization of competencies and commitments by public, business and civil society partners, to contribute to the expansion and the enhanced quality of education' (Draxler, 2008, p.16). The WEF promotes this broader concept of business and/or non-profit civil society organisations working in partnership with government agencies and official development agencies. This concept entails reciprocal obligations and mutual accountability, including either voluntary or contractual relationships; the sharing of investment (financial or in-kind), reputational risks and joint responsibility in design and execution (WEF 2005: 8).

The IFC Handbook on PPPs in Education (LaRoque, Tooley, Latham and Patrinos; 2001) sets out the following categories of partnerships- (i) private operation of public schools: contract schools; (ii) private sector supply of inputs into the education process; (iii) education vouchers and scholarships, and (iv) delivery of education by private providers.

A small group of policy entrepreneurs and educationists located at a select number of international organisations, transnational education and management consultancy firms, and academic institutions were responsible for the promotion of ePPPs in the development domain. These policy entrepreneurs came together under the auspices of the World Bank Economics of Education thematic group in the 1990s and opened a research and discussion line on private and alternative forms of education provision. Partnerships in education were thought of as an evolution of the privatisation agenda. These policy entrepreneurs and the education and management consultants who joined them along the way, developed a reform toolkit for the developing world in accordance with which they sought to shape economic policy in countries across the globe. The toolkit had as its objective, the liberalisation of the education sector in countries of interest, in Asia, Africa and Latin America, to generate an environment conducive to the emergence of a more vibrant private sector. The role of the State was not de-emphasised in this scheme; the State was to play a significant role in providing the appropriate funding and regulatory environment in which private competition among education service providers can thrive and grow (Robertson and Verger, 2012). PPPs constituted the perfect vehicle to introduce these reforms. And academic and professional conferences as well as publications of internationally renowned and powerful organisations, constituted the platforms and mechanisms for the propogation of this agenda by these policy entrepreneurs (Verger, 2012).

The International Finance Corporation (IFC) has been an important and unique actor in the growing arena of public-private partnerships (PPPs) in education, as it is both a PPP in its own right (a partnership that brings together public funds and governance with private investment), and a promoter of PPPs. At the transnational scale, the IFC pools publicly generated intergovernmental funding which it then uses to provide investment capital to private sector education service providers in low and middle-income countries. Although the IFC made its first investment in education in 1989, it was only in 1995 that its activities in education began to develop in earnest (Mundy and Menashy, 2012). IFC held its first regional conference on private education in 1999 in Cote d'Ivoire and conducted reviews of the business environment for private education in Kenya, Cameroon, India, Ghana and China (IFC 1999: "Draft Education Strategy"). The IFC's Health and Education Group was established in 2001.

In the course of its country reviews, the IFC noticed some shifts underway in developing countries, which it highlighted in its second education strategy paper, "Investing in private education: IFC's strategic directions" (2001)

(i) The policy environment was becoming more accepting of private sector involvement in education;

(ii) Families were seen to be more willing to pay for education than in the past, and there was already a rising demand for and growth in private schools;

(iii) Due to the rapid increase in primary school completion rates (potentially due the EFA initiatives since the early nineties), there was increasing demand for secondary education.

By the late 1990s, besides the multilateral aid agencies like IFC-World Bank and the Asian Development Bank (ADB), the UN group of organisations and bilateral aid agencies like USAID and DfID (the UK), had all started focusing on partnerships. The Millennium Development Goal (MDG) of universalisation of elementary education (EFA), paradoxically accelerated the push for involvement of non-state actors in education, even as States assumed responsibility for the fulfillment of the MDG. As stated elsewhere, the UN Global Compact 2007 was established in 1999 to bring business on board in the quest to achieve the MDG of EFA. In 2004, the UN launched its PPP programme, the underlying object of which was to combine the efforts of States, multilateral organisations and the private sector (both for-profits and non-profits) in the pursuit of commonly accepted goals, thus transforming the multilateral system (Bull and McNeill, 2007). "PPPs were ... a means to make the corporations pull in the

same direction as states and multilateral organizations" (Bull 2010). The UN in its Global Compact 2011 expressed enthusiasm and optimism with regard to this model thus: "Never before have have the objectives of the international community and the business world been so aligned. Common goals, such as building markets, combating corruption, safeguarding the environment and ensuring social inclusion, have resulted in unprecedented partnerships and openness among business, government, civil society, labor and the UN". Indeed, partnership did seem to have become the 'mobilizing term implying all manner of desirable objectives can be achieved' (Utting and Zammit, 2006).

The five intergovernmental agencies spearheading the global EFA movement ( the UNESCO, the UNDP, the UNFPA [United Nations Population Fund], the UNICEF and the World Bank) share a consensus view about the value of PPPs and include support for the PPP concept in their action at the global level. UNESCO's relations with the private sector encompass cooperation with business corporations, small and medium enterprises, philanthropic foundations, professional and economic associations as well as other organisations of businesses, individuals, communities, parents and families. UNICEF, which is involved in several multi-stakeholder partnerships (MSPs) with the other UN organisations and the World Bank, recognises and nurtures its affiliations with corporations, and together with its corporate partners, it has mobilised resources, created programs, developed policies and designed and implemented advocacy initiatives (UNICEF Annual Report, 2006). UNICEF was a pioneer among the UN organisations in the matter of seeking corporate funding and collaboration (Bull 2010). UNDP claims that business and development as mutually reinforcing, in that the rising incomes resulting from the promotion of development by businesses through the employment of the poor would generate new market opportunities for them.

(EI, 2009)

The World Economic Forum has also been keen on initiating and boosting MSPs all over the world to (a) establish the basic conditions for effective learning, (b) improve educational content and skill building, (c) foster effective education management, and (d) engage in advocacy. It launched its Global Education Initiative (GEI) in 2003. In January 2007, the UNESCO and the WEF jointly launched the Partnerships for Education (PFE), arising out of WEF's GEI. The goals of this joint initiative were to enhance global understanding of MSPs for education (MSPEs), focusing particularly on the roles of governments and the private sector, and to support the delivery of such partnerships to help achieve the EFA goals.

(El, 2009)

**Draxler (2008) enumerates public sector expectations of the benefits of ePPPs**

- Obtaining additional resources
- Getting access to management and implementation expertise
- Increasing economic relevance of education and reaching specific groups
- Innovation and greater diversity of education provision including pedagogy
- Introduction of improved use of technologies in the learning environment
- Cost reductions
- Lower accountability compared to contractual arrangements

Patrinos et al. (World Bank, 2009), who do see ePPPs as contractual arrangements, argue that 'the main rationale for developing public-private partnerships (PPPs) in education is to maximize the potential for expanding equitable access to schooling and for improving education outcomes, especially for marginalized groups' (p.9). They also explain the potential savings that can be derived from deregulating employment conditions and salaries for teachers which according to UNESCO (2010) data, comprise between 70% and 90% of the education budget, by arguing that 'the public sector has less autonomy in hiring teachers and organizing schools than the private sector does' (p.4).

Education International ( EI,2009 ) also cites a few operational and generally unmentioned reasons for governments taking recourse to PPPs- (a) to make up for constraints on public budgets; (b) to get around political limits imposed on the levels of budget deficits and government borrowing; (c) to mobilize resources in the absence of effective systems for collecting revenue, especially in developing countries.

IMF (2004:3), does concur that one of the main motivations behind PPPs could be budgetary/borrowing constraints of governments: "...it cannot be taken for granted that PPPs are more efficient than public investment and government supply of services...PPPs can be used mainly to bypass spending controls and to move public investment off budget and debt off the government balance sheet, whilst the government still bears most of the risk involved and faces potentially large fiscal costs".

The World Economic Forum (WEF, 2006:32) explained the need for multi-stakeholder partnerships (MSPs) in education, in the context of the MDG of EFA:

"The Millennium Development Goal (MDG) on education pledges to ensure that by 2015 children everywhere-boys and girls alike- will be able to complete a full course of primary schooling. However, since 2000, much of the world is not on track to meet this goal. More than 100 million school-aged children do not attend school; of these, 60% are girls. The vast majority (96%) are in the developing world, particularly sub-Saharan Africa and South Asia".

The IFC uses a similar argument of dearth of Government capacity to achieve the EFA objective, especially in developing countries, to advance the case for private engagement in education:

"Few would argue against continued and increased public financing of basic education, which produces the broadest social benefits. However, there is no *a priori* reason for all education to be publicly provided and funded at all levels. The appropriate role for the public and the private sectors in the provision and financing of education should depend on conditions specific to each country. Some have very little need for private activity, given the willingness of the taxpayers and the commitment and ability of the government to support broad-scale, largely free public education at all levels. In others (most developing and many developed countries), despite significant investment in education reform, governments struggle to extend quality services to their citizens. In these situations, there is significant scope for the private sector to complement or partner with the public sector in provision and financing" (IFC 2001, "Investing in Private Education:IFC's strategic directions").

While a variety of rationale have been put forth for partnerships as a mechanism to achieve EFA goals in the developing world, limited evidence exists of their effectiveness in doing so. "Although there has been a rapid scaling up of partnerships, relatively little is known about their contribution to basic UN goals associated with inclusive, equitable and sustainable development. While considerable effort has gone into advocating partnerships, far less attention has been paid to developing the analytical tools and capacities needed to adequately assess their development impacts and implications, and to draw lessons for the way ahead" (Utting and Zammit ,2006, p.1).

While proponents of ePPPs tout their benefits of competition such as improved access and choice, and even improved student performance in some cases (Patrinos et al., 2009), evidence from many countries that have implemented PPPs point to increasing social stratification resulting from these programs, as publicly funded schools compete for students with the best performance potential or 'low cost students' who typically belong to the more privileged strata

of society. This has been found to be true in Chile which introduced a nation-wide voucher program in the 1980s, where for-profit schools selected students of a certain profile by selecting where to locate themselves; most of them located themselves in urban areas (Carnoy and McEwan, 2003). In Sweden too, where the Free School Initiative (a voucher program) was launched in 1993 to enhance choice, 70% of 'free schools' ended up being located in the three main Swedish urban centres (Duncan Hall 2010). Similarly, the Academies in the UK, which were originally established as PPPs between the UK Government and private consortia to provide quality education to underprivileged youth, morphed into a massive programme that encompasses nearly 50% of all secondary schools in England today. Granted regulatory license to select students eligible for enrolment, these largely publicly funded schools have also become the preserve of the socially advantaged sections of society. The result is school segregation with the most disadvantaged groups ending up with very little choice, and the households that enjoy the advantages of class, wealth and connections with the maximum choice (Ball and Youdell, 2008). Ball and Youdell also observe that forms of privatisation in and of public education (such as PPPs) tend to have an impact on the entire sector, as they change the way education is organised, managed and delivered; how the curriculum is decided and taught; how students' performance is assessed; and how students, teachers, schools and communities are judged.

Draxler (2012) draws attention to a series of design problems in ePPPs, as promoted by multilateral organisations and fora in developing countries. These include (a) the informal nature of such collaborations with less than desired levels of transparency and accountability; (b) their lack of alignment with national development aims and strategies and the prevalence of fragmented, mutually conflicting or wasteful initiatives as seen from the national perspective; and (c) their focus on activities desired by influential private partners rather than the needs of the local population. Let us consider each of these criticisms in turn.

According to Kell (2003), with the World Bank and the IMF in the forefront, development assistance was being increasingly described and practised as an undertaking involving both the public and private (including civil society) sectors, often in an *informal collaboration that is based more on trust than on explicit rules and regulations*. The UN Global Compact relies entirely on guidelines, self-reporting and examples of good practice. As Draxler (2012) puts it: "Informal collaboration, however appealing, cannot adequately manage conflicting objectives, ensure transparency and accountability, and monitor for matching results to expectations and resources".

As for the lack of alignment of PPPs and their objectives with national development strategies, she declares: "Based on agreements between (mostly multinational) corporations and entities within governments or development institutions, public private partnerships can and do develop activities parallel to the mainstream and remain outside normal accountability and transparency...Thus, there can be contradictions between broad development aims and partnerships conceived by a small number of actors to achieve somewhat narrow goals". She also points to the shortcomings of evaluations of these projects in that "...few are principally concerned with overall impact on the education system or even the local situation over time, but are on the whole satisfied with short term goals and satisfaction of partners...".

In a similar vein, Bano (2008), while evaluating PPPs in Pakistan states:

"Most PPP programmes remain ad hoc, have little systematic impact in addressing the fundamental challenges of access, quality or equity, and because of often being reliant on NGOs or donor funds rather than state resources, face problems of financial sustainability. In an atmosphere where state officials have high distrust of the NGOs and the private sector and incentives for engaging in partnerships are flawed, the PPPs have limited ability to address the fundamental challenges of meeting EFA goals...rather, ad hoc efforts can contribute to greater fragmentation of education planning and enhance regional disparities".

Draxler (2012) also finds a disconnect between these individual project initiatives (PPPs), and the conceptual and operational shift in the international aid arena from project to (nationwide) programme approaches. Processes and mechanisms such as Sector-Wide Approaches (SWAps), EFA National Plans and the World Bank's EFA Fast Track Initiative (FTI), all indicate this shift. The EFA-FTI launched in 2002, as a global partnership between developed and developing countries to achieve the EFA objective by 2015, encouraged developing countries to place a single sector plan for the achievement of EFA at the forefront of their poverty reduction strategies, demonstrably backed with domestic resources, so that donor (developed) countries could provide coordinated financial aid and technical support (EI, 2009).

Draxler (2008) traces the aforesaid misalignment inherent in PPPs to the fact that most partnerships arise from a programme or a project idea rather than a clearly defined need. She observes that most partnerships are developed around a notion of supply: the will of a party or several parties to contribute to the provision or enhancement of education in a way that they judge positive.

Despite these shortcomings, one major reason why ePPPs have continued to thrive across the world is that a specialist (and increasingly corporate) industry has sprung up around ePPPs, particularly in countries like the US, the UK and Australia, which is increasingly exporting its expertise globally. It includes a growing number of private actors from foundations, specialist PPP firms, global and local consultancy firms, banks, thinktanks and specialist law firms (Robertson and Verger, 2012). This specialist PPP industry is then part of an emerging global education service industry that includes education consultants like Cambridge Education, Education Management Organisations ( EMOs) that run public schools under PPP arrangements as in the case of charter schools in the US and Academies in the UK, education corporations like deVry, Bridgewater and Edison that run chains of schools, other Education Service Providers (ESPs) that engage in performance assessments, leadership training, professional development etc. that support the accountability regimen in education, and publishing giants like Pearson and McGraw-Hill (Saltman,2010; Robertson and Verger, 2012).

Also, a small number of global management consultancy firms including KPMG, Ernst and Young, Price Waterhouse Coopers, McKinsey, Deloitte and Touche, Grant Thornton and the Hay Group, controlling half of the world's management consultancy market, with offices in more than 140 countries, have been major players in the expansion of the ePPP industry across the world (Robertson and Verger, 2012).

As Greve (2010, p.506) states: "For sheer expertise in the development of legal frameworks concerning PPPs and the actual practice on the ground in leading countries, the global consultancy firms, given their superior knowledge of how ePPPs are progressing, have few rivals". Saint-Martin (1998) argues that it is the openness of governments to this kind of expertise (economic knowledge/accounting) and the permeability of the public sector to outside experts that accounts for the growing dominance of these consultants: "...there is a close relationship between the development of a given field of social knowledge - in our case management consultancy, and the openness of state institutions to the use of that knowledge" (*ibid*, p.325). The term "consultocracy" is used to describe the power of consultants in advising Government and in shaping Government policy. Larbi (1999) similarly declares: "[The] large international management consultants, accountancy firms and international financial institutions...have been instrumental in the increasing 'importation' of new management techniques into the public sector...as state agencies contemplating institutional change or

strengthening often enlist the services of expert consultants to clarify available options- and recommend courses of action". In the case of ePPPs, these consultants who design the contracts are oftentimes also the lawyers and auditors, thus raising major concerns over conflicts of interests, transparency and accountability (Robertson and Verger, 2012).

Some authors have expressed concern over the shrinking role of the State and public accountability with the growth of ePPPs. Marques and Utting (2010, p.1) state that the main consequences of these partnerships are "the rolling back of certain state functions and capacities, the residual status accorded to social policy and the disregard for power imbalances". Speaking of power imbalances, teachers' trade unions are frequently absent from discussions and negotiations concerning ePPPs and MSPEs, and unions are often not present in private schools or projects involving PPPs (EI, 2009).

Bruhl (2007) views PPPs as contributing to the privatisation of global political relations, at least with respect to decisions about economic activity. There are also arguments that governance concepts such as PPPs tend to reduce democracy to negotiations within civil society between extremely unequal actors or simply to participatory mobilisation (Robertson and Verger, 2012). Cutler et al. (1999:4) raised alarms over the various non-state actors constituting the specialist PPP industry, increasingly acting as market-oriented sources of authority which "...establish rules, norms and institutions that guide the behaviour of the participants and affect the opportunities available to others". They declared that the rapid growth of private actors and their interests in education had given rise to 'private authority' as privileged rights of citizenship and representation were increasingly being conferred on corporate capital. Thus, they saw an upward trend in the management of regional and global affairs by economic rather than state/political actors, as the State divested itself of activities traditionally associated with the public sector and in the public interest. Burgos (2004) also expressed concerns over the myriad set of actors participating in PPPs, each with their unique operating mechanisms, guiding logic and motives for delivering and financing public (education) services. Crouch (2011) opined that the State's ceding of the power to make decisions about how to frame the regulatory and operational basis for educational activity, to economic actors, represented a shift of authority from the public realm to the private realm, and from the national to the supranational, and that this had significant implications for education, societies and democracies.

Jayasuriya (2008) argues that when governance is located in multiple sites, both the governance of educational PPPs and PPPs as a tool of governance, become problematic. In the case of developing countries in particular, the regulatory and monitoring capacity or bandwidth of the Government is especially important in ensuring that ePPPs are contributing to the national EFA and other developmental goals; and it is usually severely lacking. In the words of Moran and Batley (2004, p.3): " The longer term monitoring of performance against standards and indicators requires procedures and resources for inspection, reporting and implementation of legislation. These presuppose government regulatory capacity and competence that is very often lacking".

We close this section with Draxler's (2012) recommendations to make ePPPs work in a development setting.

"Governments need to ensure that informal partnerships do not distort national priorities or fly under the radar of international agreements and national laws...The public sector has to ensure that partnerships avoid conflict of interest by providing competitive advantages to corporations chosen. It also has to ensure that all partners assume some risk, and that the entire cost of failure does not fall on the public sector".

### 4.2 History of ePPPs in India

PPPs in school education have been in prevalence in India in the form of the 'aided schools' model ever since independence, in fact even prior to independence during colonial times. Private operators run schools with funding support from the government. Government-aided schools are managed by private trusts, they follow the relevant state board curriculum and norms, and have to admit all that apply. Typically, the private operator incurs the infrastructure costs and the state government provides the teacher costs and some infrastructure support. Recognised private schools to which the Government grants aided status receive block grants; between 90-95% of the grant pays for teacher salaries, 5% covers non-salary expenditure like repairs and maintenance, purchase of education aids and utility payments. Subsidised land could also be part of the grant. There are no school fees as in Government schools, but as the grant does not cover much of the non-salary recurring costs, these schools often charge fees in other forms, subject to state regulations and school-specific rules stipulated by the Government (CSF-FICCI, 2014).

While the operational autonomy enjoyed by these schools varies from state to state, teacher recruitment and salary matters were taken over by the governments in several states after agitations in the late 1960s, by teachers in aided schools who claimed that private operators were not paying them fair wages. Such an assumption of responsibility (and authority) by the government to recruit and pay aided school teachers, adversely affected the accountability of these teachers to the school management. According to Kingdon (2008) who studied the Uttar Pradesh schooling system, private aided schools, in the first two decades after independence, operated very much like charter schools in the US, run by private management but funded largely by government grants-in-aid, and charging the same fees as Government schools. But following the above-mentioned agitations, the Salary Distribution Act, 1971, was passed, under which aided school teachers were also paid the same salary levels as Government school teachers, and the payment was made directly from the state treasury. Aided school teachers also came to be recruited by a government established Education Service Commission, rather than by the school. Moreover, as aided schools became more and more like Government schools, aided school teachers began to unionise and even entered the political arena. While government school teachers were barred from entering the state legislative bodies, aided school teachers were not. Taking advantage of this, many teacher union leaders from aided schools also became MLAs/MLCs (Members of the State Legislative Assembly/Council), thus constituting an extremely powerful lobby within the state. 80% of the secondary education budget in UP typically goes to grants-in-aid (most of the aided schools are at the secondary, not at the elementary level). (Kingdon, 2008)

Similar to UP, other states had also passed legislation in the 1970s, centralising recruitment and pay decisions for aided school teachers, eg., the Direct Payment Agreement Act, 1972 in Kerala. But in most states, aided schools have some flexibility over government schools in that they have the autonomy to shortlist and interview candidates for teaching positions and to conduct professional development programmes for teachers and principals; they also have control over daily management of schools (CSF-FICCI,2014).

Government aided private schools account for 5.5% of the total number of K-12 schools in the country, and 11.5% of the total K-12 enrolment. There are around 67000 aided elementary schools (4.6% of the total number of elementary schools), and 26000 aided secondary schools (10% of total) in the country. Nearly 10% of K12 teachers in the country are employed by private aided schools.

(U-DISE 2015-16: as of September 2015)

### 4.3 Evolution of the policy landscape for ePPPs in India

The District Primary Education Programme (DPEP), which was initiated in 1994, was the largest education programme of the Government of India as of that date, almost entirely funded by a consortium of external aid agencies led by the World Bank and including the European Community, UNICEF, the UK and the Dutch Governments. It was intended to be a nationwide programme to revitalise primary education, which was introduced in phases across the country, and funded mostly (85%) by the Central Government, for creation of school infrastructure, recruitment and training of teachers, and the establishment of a decentralised network of resource centers. The DPEP aimed to provide access to primary education to all children, reduce primary dropout rates to less than 10%, improve learning achievement and reduce gender and social gaps in achievement (Government of India (GOI), 2005, cited in Azam and Saing, 2016). In short, the aim was to address 'enrolment, dropout rates, and learning achievement among gender and other social groups' (Government of India (GOI), 1995:5; cited in Sriprakash, 2012).

While the Government expense on education had always been way below par relative to the massive illiteracy problem in the Indian population and extreme inequality in the education dimension, the DPEP experience vetted the appetite of the Government for extra-budgetary sources of funds. This was evident in the following statement in the Tenth Five Year Plan (2002-2007) Approach Paper: "An important channel for mobilising resources for development, particularly for social sectors, namely Externally Aided Projects...and direct funding of projects (i.e. outside budgetary flows) by NGOs (non-governmental organisations) has not been sufficiently integrated with our planning process...an important source...in the third world context, is not being adequately tapped" (Planning Commission, 2001:17).

In the year 2000, a special subject group on policy framework for private investment in education, health and rural development, constituted with industrialists Mukesh Ambani and Kumaramangalam Birla as members, under the Prime Minister's Council on Trade and Industry, submitted its report (Ambani and Birla, 2000). The report recommended that the Government confine its responsibility to funding and ensuring that primary education was compulsory and free, funding and ensuring that secondary education was compulsory while allowing a healthy mix of state supported education and private initiatives, funding and bringing about 100% literacy, supporting disciplines that have no market orientation, providing

financial guarantees for student loans, and ***ensuring uniformity in content and quality*** and education development planning. It suggested that the government leave higher education entirely to the private sector and remove all economic controls so as to create a 'market for education'. It also opined that the resource gap in funding public education could be addressed by decentralising the management of public education and encouraging the expansion of private and community-based schools.

In 2002, the working group on PPP was established in the Prime Minister's Office (PMO), and within its purview, a PPP sub-group on the social sector was established in 2003. This sub-group concluded: "Involvement of community, family neighbourhoods and voluntary organisations under PPP is observed to have led to empowerment of citizens" (Planning Commission, 2004:3), and defined the benefits of PPPs in terms of a "clear ***customer focus*** for enhanced social services" (Planning Commission, 2004:5). In education, the PPP sub-group proposed using PPPs to resolve the well-known problem of teacher absenteeism and credible inspections as "an alternative to the traditional approach of providing services through in-house facilities...Community participation through supervision of schools and involvement of non-profit service agencies in providing social services is being increasingly favoured and encouraged by governments" (Planning Commission, 2004:15). The Tenth Plan Mid-term Review did note particular difficulties in implementation of programmes of NGOs with Government of India funding. These were (1) lack of effective mechanisms for monitoring and evaluating their activities, (2) an apparent duplication of Government activities in many cases, and (3) lack of information at the state level on activities conducted (Planning Commission, 2005:57). But it did not make any regulatory recommendations besides stressing the importance of "suitable taxation and land policies, concessional loan programmes...to encourage the expansion of secondary schools by NGOs, trusts, and registered societies in the private sector" (Planning Commission, 2005:58). [Cited in Srivastava, 2010]

According to Srivastava (2010), the Government seemed aware of the controversial nature of PPPs in education, in public perception, and the XI Plan Approach Paper seemed to suggest a public relations exercise to garner support for PPPs. "...The key to making PPPs acceptable is to create an environment where PPPs are seen to be a way of attracting private money into public projects, not putting public resources into private projects" (Planning Commission, 2006b:41). Srivastava ( 2010) concludes: "Perhaps that is why in education, interventions by the relatively less contentious NGOs, voluntary organisations and community organisations is stressed, and that of private for-profit organisations is ignored, despite the wider acceptance in

government circles that a slew of for-profit 'low-fee private' schools targeting disadvantaged groups have emerged in recent years because of inadequate government provision".

In April 2011, the Planning Commission set up the Working Group on Private Sector Participation including PPP in School Education, for the Twelfth Five Year Plan (2012-2017), under the Department of School Education and Literacy, Ministry of Human Resource Development (MHRD), Government of India. The working group submitted its report in October 2011 (GOI, MHRD-Planning Commission, 2011). According to this report: "The primary purpose of PPP in education is not just for using the private party as an executor or a source of funds though these may be parts of the role in specific cases, but to seek a collaborative engagement that builds on the strengths of different players and creates a total greater than the sum of parts. In this regard, the Twelfth Five Year Plan envisages involvement of private players to provide quality education with social objectives in mind". Regarding design of PPPs the report recommends the following: "Objective outcomes (not inputs or efforts) should be defined as clearly as possible and revised each year based on ground-level experience...When the intended outcomes are not met, support may need to be provided and/or penalties imposed. The original agreement should clearly state the consequences of non-performance". This seems like a clear outcome focus, away from inputs and process. However, elsewhere in the report, we find: "We do not have well- articulated quality standards. These must be applicable across the board to all schools. ***Alongside, the standards for provisions that are required to attain these quality standards must be created.***" So, the process also gets some emphasis here. The Model School Scheme of the Government of India, which relied on this report for its design, incorporated both input and outcome parameters in its final form; more on the details of the scheme later in this section.

Several state and local governments also took the initiative to launch PPPs in school education. Most notable are the Rajasthan Government's joining of the World Economic Forum's Global Education Initiative in 2005 (Rajasthan Education Initiative), and the adoption by the Municipal Corporation of Greater Mumbai in 2013, of a PPP policy framework for education.

### 4.4 Rationale for ePPPs in India

"Government schools in India are the largest providers of education. However, data indicates that parents are increasingly opting out of the Government system due to its poor quality and enrolling their children in private schools. Therefore, the Government must take steps to improve the quality of education in schools. Public Private Partnership (PPP) is a mechanism

that can introduce innovation and create models of quality within the Government system" (CSF-FICCI, 2014: Foreword by members of the FICCI School Education Committee).

The Report of the working group on private sector participation (GOI, MHRD-Planning Commission, October 2011) set out what a well-designed PPP in education can do: (a) raise additional financial resources, (b) improve access by supplementing existing capacity of the public school system, (c) expand the knowledge and skill base of the education sector, introducing new innovative approaches, whether pedagogic, technical or managerial, that may not be easily available in the public sector, (d) make cost of services more transparent and accountable through explicit contracts and improved contract mechanisms, and (e) ***enable the shift of focus to the desired outputs and outcomes rather than specifying how these outcomes should be achieved***.

PPP in School Education Working Paper prepared by the Central Square Foundation for FICCI, (CSF-FICCI, 2014 ), cites the following objectives of PPP in school education: (a) improving access, especially in secondary education, (b) using underutilised school infrastructure (in urban areas), (c) improving quality of education: better management and pedagogical techniques, (d)increasing choice for lower income parents, (e) strengthening accountability in the Government system, and (f) triggering competition between public and private providers. The report cites the governments of states such as Punjab and Rajasthan that have partnered with private operators to provide education in remote areas, and the Municipal Corporation of Greater Mumbai PPP policy framework that allows private operators to manage existing low-enrolment municipal schools.

The foreword to the report lays particular emphasis on PPPs which involve private management of publicly funded schools with reasonable autonomy (as in the case of Academies in the UK).

"...Global evidence suggests that whole school adoption PPPs are particularly effective at demonstrating innovation. In this model, the Government authorises and reimburses a private operator to manage school operations, with varying degrees of autonomy to innovate. Countries such as the United States, England, Columbia, Uganda and Pakistan have adopted variants of this model.

Whole school PPPs give flexibility to the operator to innovate, increase competition, give choice to low income families and hold operators accountable for the quality of outcomes..."

(CSF - FICCI, 2014: Foreword by members of the FICCI School Education Committee).

### 4.5 ePPPs in India vis-à-vis the global ePPP template

**4.51** ***Significant ePPP initiatives in India*****:** We discuss here, briefly, the initiatives of the Government of Rajasthan, the PPP policy framework adopted by the Municipal Corporation of Greater Mumbai in 2013, and the National Model School Scheme launched by the Government of India in 2007, in collaboration with state governments, to expand access to quality secondary education.

**The Rajasthan Education Initiative (REI)** was a part of the World Economic Forum's (WEF) Global Education Initiative (GEI) which was launched in January 2003. A Memorandum of Understanding was signed between the Government of Rajasthan and WEF in November 2005, which outlined the responsibilities of WEF and the Rajasthan Government and the intended completion of WEF's active role by November 2008. The REI was formally launched in spring 2006, driven by the Government of Rajasthan and supported by the activities of its core partners, the Confederation of Indian Industry (CII), the Global e-Schools and Communities Initiative (GeSCI), and the WEF.

"The REI was created with a focus on improving the delivery of educational services, and in particular on promoting equitable access, enrolment and retention of children in schools, reducing gender disparities, promoting skills development and enhancing learning levels. The overall objective of the REI was to demonstrate robust and scalable models, approaches, tools and methodologies that may significantly impact educational outcomes and transform the educational scenario of the State"(GeSCI, 2009). In the three years up to 2008, the Government of Rajasthan signed 26 Memoranda of Understanding (MOU) with partners under the auspices of the REI that brought a wide variety of initiatives to the state's schools. The strategies adopted in the REI included, among others, evolving innovative and locally appropriate models of PPP with scaleup potential, and demonstrating the success of PPP interventions by evaluating their impact on students with reference to the overall objectives of the SSA, and disseminate the outcomes and lessons from the REI for replication in other parts of the state, in other Indian states, and in other developing countries. Given the comprehensive nature of the REI, despite its wide range of stakeholders and support, not all of its objectives were achieved. Overall, the REI failed to deliver an integrated approach to transforming education through partnerships, even as some of the initiatives within it achieved considerable success (GeSCI, 2009; cited in WEF 2012).

In September 2017, the Government of Rajasthan announced its Policy for Public-Private Partnerships in School Education-2017, paving the way for Government schools to operate on PPP model. In the first phase, on a pilot basis, 300 rural Government secondary/higher secondary schools (out of a total of 9895 Government secondary/higher secondary schools across the state) were placed under PPP arrangement. According to the policy, 75% of the rural schools and 25% of the town schools were to be eventually handed over to private partners, who were expected to invest INR 75 lakhs per school on operations and development apart from providing teachers and other staff for classes' I-XII at these schools.

(Times of India, September 5, 2017)

**Municipal Corporation of Greater Mumbai (MCGM) PPP Policy Framework, 201*3*:** The objective of the framework was to leverage the support of NGOs, foundations and private agencies for high quality education provision to underprivileged children in existing municipal schools. The types of PPPs envisaged were (i) full school management with private teachers, (ii) full school management of MCGM teachers, (iii) special services partnerships involving special service inputs like student assessments, training of teachers/principals, remedial education, and (iv) school support: one-time donation of materials/services such as computers, furniture, one-time capacity building like workshops.

The framework includes

- pre-determined performance standards the private operator is required to meet as a condition for renewal
- pre-defined selection rubric for private providers including their experience, strength of leadership, education background/expertise of team members, ability to raise outside funds (strength of current funders, near-term funding commitments), innovative approaches (in pedagogy, teaching-learning materials, community outreach) to improve learning outcomes and a proven track record in implementing them, and ***focus on measuring learning outcomes (through consistent third party/internal assessments) and concrete examples of impact on learning outcomes thus measured.***
- appointment of a selection committee consisting of senior government officials, and reputed leaders from private, NGO and education sectors
- built-in evaluation checkpoints

The framework also sets out an evaluation rubric to assess performance, with weights assigned to different metrics to determine a composite score:

(1) Increase in percentage of children with greater than 80% competencies from the previous standard, between base-line and end-line of the current standard (45% weight)

(2) Objective annual third-party assessment of student learning, on a total score of 100, for standards 3 and 6 (35% weight)

(3) UNICEF-conducted SMC (School Management Committee)/PTA (Parent-Teacher Association) feedback through a well-defined survey (20% weight)

(CSF-FICCI, 2014)

**National Model School Scheme (Rashtriya Adarsh Vidyalayas):** The national initiative to set up a model secondary school in every block in the country to serve as a standard of exellence for all schools in the block, was announced as part of the Prime Minister's Independence Day Speech in 2007. Of the 6000 model schools to be set up, 3500 in Educationally Backward Blocks (EBB) were to be set up entirely with public funding, and the remaining 2500 schools in non-EBBs were to be set up on PPP mode. In the meeting of the full Planning Commission in September 2007, the Prime Minister stated: "...It must be recognised that about 60% of secondary schools are under private management, and the Ministry and the Planning Commission should focus on incorporating the role of the private sector wherever possible...". While the scheme was rolled out in 2009 in the case of the public-funded model schools in the EBBs, it was in April 2011 that the Planning Commission set up the Working Group on Private Sector Participation including PPP, under the Department of School Education and Literacy, MHRD. The Working Group submitted its report in October 2011. As per the recommendations of the report, the original plan was to roll out 500 schools in 2012-13 and another 1000 schools each in 2013-14 and 2014-15. But due to delays, 500 PPP schools were to start operating in 2015-16. In the first round of the first phase of the bidding process, in 2012-13, 65 private operators were shortlisted and 41 blocks selected (Haryana (13), Rajasthan (11), Madhya Pradesh (6), Punjab (3), Uttar Pradesh (2), Karnataka (2), Gujarat (1), Maharashtra (1) and Andhra Pradesh (1). Between 2014-15 and 2015-16, another 478 blocks were to be covered. In July 2013, the Model Concession Agreement for model schools under PPP was finalised based on the recommendations of the Working Group (GOI-MHRD-Planning Commission, October 2011). In January 2014, in the second round of the first phase of the bidding process, another

127 operators (including Bharti Foundation, Adani Foundation and IL&FS) were shortlisted and a further 150 blocks selected.

In March 2015, the new Government at the Centre withdrew its support of the model schools scheme from the fiscal year 2015-16 onwards. At that time, overall, 2329 model schools had already been sanctioned to the state governments of which 1086 were functional and another 519 had been constructed. While the state governments lost GOI funding for publicly-funded model schools in EBBs, the model schools under PPP mode that were to begin operating in 2015-16 were also affected. The GOI was expected to have released some INR 5000 crores per annum in relation to these schools by way of per-capita funding of Government-sponsored students and supplementary capital grant (Livemint, March 4, 2015).

There are model schools in 74 blocks in Karnataka, originally notified in 2010-11, and 160 model schools in Andhra Pradesh; 117 primary and middle schools in Uttarakhand are in the model school programme. It is not clear how many will survive in the face of the withdrawal of support by the Central Government, and in what manner. The Government of Chattisgarh, for instance, contemplates offering even those model schools in EBBs (74) on PPP mode. But the PPPs, especially in remote areas, are viable only with per-capita funding and infrastructure grant from the Government to cover part of the operational and capital expenditure. As we noted earlier in the section, the Government of Rajasthan announced a policy last year to hand over most of its rural schools to private partners in the course of the next few years. It will be interesting and edifying to witness the progress of this scheme.

We now examine the features of the Model School Scheme on PPP mode, as notified by the previous government at the Centre and the state governments.

***Main features***

- ***A model school will have infrastructure and facilities at least of the same standard as Kendriya Vidyalayas.*** In particular, the Pupil Teacher Ratio (PTR) should not exceed 25, and the Student-Classroom Ratio (SCR) should not exceed 40; adequate ICT infrastructure, internet connectivity, and a full-time computer teacher should be present; special emphasis must be placed on teaching science, mathematics and English; necessary infrastructure for sports and co-curricular activities should be provided; arts and music teachers, besides the main subject teachers, must also be present.

- The schools will follow the National Curriculum Framework (NCF) 2005, and subsequent curricular frameworks the GOI may adopt from time to time.
- Selection of students will be through independent selection tests
- Selection of principals and teachers will be through an independent process to be developed in consultation with the State Government.
- ***Schools will be affiliated to the CBSE and the infrastructure norms as per CBSE will be needed to be adhered to.***
- The model school will typically cover Classes VI -XII.

***Performance Parameters***

- Results in Board Examinations
- Results in Learning Achievement Surveys to be conducted for different classes every year
- Availability of infrastructure- classrooms, laboratories, computer rooms, toilets, drinking water and so on, and the quality of the infrastructure
- State of maintenance of the infrastructure
- Attendance of teachers/students
- Teacher qualifications and the status of refresher training for teachers
- ICT usage
- Performance in the Test on Spoken English
- Performance in co-curricular activities

(GOI, MHRD, 2008, 2014: Model School Scheme; GOI, MHRD- Planning Commission,2011)

**4.52** ***Comparison of major features of select Indian ePPPs:*** We now compare major features of PPPs under the Rajasthan Education Initiative (REI), Punjab Adarsh Schools, MCGM schools under partnership and the Rashtriya Adarsh Vidyalayas (Model School Scheme), in order to discern a template.

Under the REI, the Rajasthan Government entered into partnerships with multiple partners including the Bharti Foundation and Grameen Shiksha Kendra, to improve quality of education service delivery in existing Government elementary schools in rural Rajasthan.

The Punjab Adarsh Model School Scheme was launched in 2007. The aim of the scheme was to provide free education to underprivileged children in rural Punjab up to Class XII, of a quality equivalent to that enjoyed by urban children, with the object of making them employable. The target was to establish one school in each block in the state. The state-level Punjab Educational Development Board (PEDB) was the overarching body governing the management of Adarsh schools, responsible also for the timely release of Government grants.

The MCGM had school management contracts with private partners, both with arrangements that permitted autonomy in recruiting teachers, and those which retained MCGM teachers. Our comparative analysis below includes only the former category.

**Comparative analysis of major features of significant ePPP programmes**

| **ePPP Programme** | **PPPs under REI** | **Punjab Adarsh Schools** | **MCGM Schools** | **Model School Scheme (GOI)** |
|---|---|---|---|---|
| | | | | |
| **Features** | | | | |
| | | | | |
| Eligibility of private partner | No set norms | Business group: Minimum Net worth INR 25 crores<br>Educational Group: Minimum five years of experience with at least two properly affiliated educational institutions under operation over previous 3 years. | Pre-defined selection rubric including experience and leadership, education background of team, innovation and track record in measurement of learning outcomes | Track record of running at least one CBSE school; eligible for three schools if at least two batches graduated Class X Board exam, or if possessing five years of experience in running educational institutions and willing to deposit INR 25 lakhs.<br>Corporate entities with net worth of at least INR 25 crores willing to deposit INR 50 lakhs per school also eligible. |
| Selection of private partner | No announced process | Eligibility norms above. | Eligibility norms above | Bids evaluated based on track record, financial standing and operational preparedness. |
| | | | | |
| ***Cost sharing*** | | | | |

| ePPP Programme | PPPs under REI | Punjab Adarsh Schools | MCGM Schools | Model School Scheme (GOI) |
|---|---|---|---|---|
| Cost-sharing: Capital expenditure | Existing school infrastructure (Government) Renovation: Private partner. | 50:50 on cost of building subject to a cap for the Government; land available at nominal rates on lifetime lease. | Existing Municipal School Infrastructure (Government) | Infrastructure grant by the Government of India in the form of payment of additional 25% per sponsored student. |
| | | | | |
| Cost Sharing: Operational expenses | Teachers and other operational costs by private operator. Government: textbooks &stationery, mid-day meals, uniforms and scholarships. | Shared 70:30 between the Government of Punjab and private partner. For an enrolment of up to 2000 students. Government also provides free mid-day meals, textbooks, stationery and uniforms. | Per-child payment by Government: 60% of the prevailing operating cost from the second year onwards, based on performance. Also meals and supplies for children provided by the municipal government. | Per-child payment by the Government of India for students sponsored by it (about 40-50% of the enrolment), at the prevailing per-student operational cost at a Kendriya Vidyalaya. Mid-day meals and supplies to students will be provided by the state government. |
| | | | | |
| Student Admission | No reservation, eligibility norms | 25% reserved for students from villages whose Panchayats provided land. | No reservation, eligibility norms. | Students in the same block who have studied up to Class V eligible to apply and admitted subject to admission test. |
| | | | | |
| Fees charged | No | No | No | No fees to Government-sponsored students until Standard VIII; nominal fees of up to INR 50 per month may be charged for Classes IX-XII |
| | | | | |
| ***Operational autonomy*** | | | | |
| Hiring & firing teachers | Yes | Yes | Yes | Yes |
| | | | | |
| Other aspects | Yes | Yes | Yes | Yes |
| | | | | |
| | | | | |
| ***Performance*** | | | | |
| Performance parameters | Pupil Teacher Ratio | NA | Student learning and parent-teacher feedback | Results in Board examinations and learning achievement surveys; state of infrastructure; qualifications and training of teachers; attendance of |

| ePPP Programme | PPPs under REI | Punjab Adarsh Schools | MCGM Schools | Model School Scheme (GOI) |
|---|---|---|---|---|
| | | | | teachers/students; performance in spoken English and co-curricular activities; ICT usage. |
| Performance assessment | Annually by the Government; third-party assessment every alternate year | Punjab Educational Development Board, autonomous authority tasked with standard-setting, assessment, reporting and action based on performance. | Annual third-party assessment for standards 3 and 6; UNICEF-conducted feedback survey of PTA/SMC members | Learning Achievement Surveys conducted for different classes every year. Regular inspections, monitoring for quality assurance. |
| Performance-linked incentives | NA | Contract termination | Contract termination | Penalties levied as per contract, for performance shortfalls or for any other violation of agreement. |
| | | | | |
| | | | | |
| Contract period | Initial period 10 years; renewable with mutual consent. | NA | 10 years | Initial period 10 years; renewable by mutual consent. |
| | | | | |
| Contract termination | At the instance of either party with two months' notice. | At the instance of either party, for failure to fulfil obligations. | Annual evaluation and renewal based on performance. | As laid out in the Concession Agreement between the Government of India and the private operator. |
| Regulatory Authority | Rajasthan State Board/RTE | CBSE/Government of Punjab/RTE | MCGM/RTE | CBSE/RTE |

Source: CSF-FICCI (2014)

**4.53** ***International Comparisons*****:** Two much-cited PPPs in the developing world are the Foundation Assisted Schools (FAS) Programme, Punjab, Pakistan, and the Concession Schools, Bogota, Columbia. The common elements in these programmes are (i) transparent selection process, (ii) per-capita subsidy, (iii) operational autonomy, especially relating to teacher recruitment and terms, (iv)performance assessment according to predetermined procedure, focus on (third party) student testing, continuing eligibility linked to meeting predetermined performance parameters.

Global proponents of ePPPs in the developing world, have put forth the following toolkit for their implementation:

- Quality education assurance agency (setting standards, outcomes, performance indicators, ***but not prescribing how they are achieved***)
- Partnership contracting agency
- Transparent, open and competitive bidding process for entry
- Performance based payments/contractual action

As far as the ecosystem is concerned, it is expected that the State will engage in information dissemination on the nature/quality of education where evaluation systems feed into overall information systems, and also incentivise ***the right kind of performance behaviour.***

(Robertson and Verger, 2012)

On a perusal of above selection of ePPP contracts in India, we find that while there is much emphasis on learning outcomes, performance monitoring and third-party assessments, besides operational autonomy, input quality also receives attention either explicitly in the contract and/or through reference to prevailing laws/regulations/norms of affiliating bodies. These are not only easily verifiable but are long baked into the existing systems, whereas the capacity to define and monitor learning outcomes may not exist within the government system. Periodic third-party assessments are included in most contracts, but they are expensive. Moreover, there is also the expectation that longer gestation periods are required to improve learning outcomes starting from a very low base, hence the typically longer contract periods of 10 years and above. Meanwhile, enrolment, attendance and dropout rates serve as useful intermediary outcomes, and the quality of inputs and process cannot be ignored, especially when public funds are being deployed. These are the realities in developing countries to which the above ePPP toolkit is meant to apply. Other elements such as transparency in bidding, selection and evaluation processes, besides clear enumeration of cost and risk sharing formulas, have been incorporated in these contracts. A separate agency or entity is also often designated to implement the contract. The contracting language is indeed very prominent in these so-called partnerships, as has been seen to be the global norm for ePPPs.

### 4.6 Voucher-based programme implicit in RTE provisions relating to private schools

The RTE Act, 2009, places the onus of provision of elementary education to all children on the State. The same Act also imposes an obligation on all private schools, including unaided private schools to reserve 25% of the available seats (in Standard I), for children belonging to weaker

sections of society, who were to be admitted free of costs/conditions. The concerned Government is however obliged to reimburse these institutions to the extent of the amount that is the lower of the fees charged per pupil and the per-pupil cost of education in Government schools. This potentially creates the largest voucher system in history, given the size of the Indian population, in particular the size of its youth population. But whether this will ultimately lead to more choice to parents regardless of their geographical location or socio-economic status in society, will depend on many factors. Various provisions of the RTE Act disallowing practices of private institutions to choose whom they may or may not allow under the programme, could go some distance in achieving this goal. But in an environment where there is widespread regulatory rent-seeking, it is doubtful that the implementation of these rules will be rigorous enough to ensure access to all. Another critical element is the availability, within a reasonable distance from any habitation, of all types of institutions, equitably across all regions of the country.

Muralidharan and Sundararaman (2015) tested the voucher-based school choice policy in the Indian context, through a two-stage experiment in rural Andhra Pradesh. The experiment involved a two-stage lottery (at the village level and at the level of the individual student) for the allocation of vouchers to finance parents to send their children to attend a private school of their choice. The voucher covered school fees, textbooks, workbooks/notebooks and stationery, school uniforms and shoes, but not transportation to attend a private school outside the village or allowance in lieu of the mid-day meal scheme provided in Government schools. The programme villages had at least one recognised private school that was willing to participate. While participation by private schools in the programme was voluntary, once they had decided to participate, they were not allowed to screen and select students. This was done based on the lottery described above. The study found that at the end of four years (either through Standards I-IV or through Standards II-V, depending on when the child entered the programme), there was very little difference in performance (test scores) in language, mathematics, English or Environmental Studies (EVS), between lottery winners (who attended private school) and losers (who stayed behind in public school), both drawn from similar demographic cohorts. Specifically, the scores in language and mathematics were lower but insignificantly so for lottery winners, slightly higher in English and negligibly better in EVS. Thus, not finding any significant improvements in performance, the authors then proceeded to stress the lower costs at which similar outcomes were attained in private schools, based on their time-use pattern analysis.

Despite the above tepid results and clear indications of potential selection bias in the sample (availability of a recognised private school willing to participate being the basis for selection of a programme village[11]), the authors in their closing narrative accord a glowing approbation to private schools and to voucher-based school choice programmes.

"...Thus, private schools produce better academic outcomes at lower cost and are unambiguously both more productive and cost-effective than public schools in India. "

“Our results on private school productivity suggest that it may be possible to substantially increase human capital formation in developing countries like India by making more use of private provision in the delivery of education.”

" ...Our results suggest that this provision (for 25% reservation in private schools for weaker sections under the RTE Act) is likely to not only reduce social stratification at limited cost to current students in private schools, but also likely to increase average productivity in the education sector by increasing the share of private schooling. This may thus be a rare example of a policy that improves equity, and efficiency, and does so at a lower cost than the status quo."

The authors found that private schools spent significantly less instructional time on language (40% less), and on mathematics (32% less), than public schools, and achieved insignificantly different (lower) results. More time was spent on English and EVS and to teach a third language Hindi. These results formed the basis for the 'efficiency' argument. The authors used their finding that the application for vouchers by eligible households and their acceptance when offered, were not related to observable demographics such as parental assets, education or caste, to conclude that voucher programmes can significantly reduce socio-economic stratification in private schools. Note that after the treatment, on average, only 8% of the children in private schools were voucher students (as against 25% stipulated under the RTE Act). Also, since the sample only included villages with at least one recognised private school willing to participate in the programme, it is prone to selection bias, and the sample was likely a lot more homogenous than representative samples at the state or national levels.

[11] Pal (2010) found that private schools were more likely to be present in villages with better-off households and with better infrastructural facilities.

While judgement on the performance of a voucher programme, still a work-in-progress, is clearly premature, the historically poor record of private schools in the matter of access to all sections of society, the lack of definitive and convincing evidence of the so-called inherent superiority of private schools in terms of student attainment, and the disturbing evidence from other countries that have adopted voucher-like programmes that points to social segregation within the system, all these produce a strong dose of scepticism regarding its success in India.

The private school lobby strongly opposed the RTE provisions concerning them and appealed to the Supreme Court contesting these provisions. They lost their plea and the Supreme Court upheld the provisions relating to the reservation of seats in private institutions for children from weaker sections of society, except in the case of minority institutions. This latter part of the decision has caused further controversy.

Meanwhile private schools and their representative associations have railed against both the stringent norms in the Act relating to the school infrastructure, and the inadequacy of compensation offered by Governments to private schools for accommodating disadvantaged children. They have also complained about delays in payments, the wide variations between states in determining compensation amounts, and the absence of consideration of capital costs while determining per-student compensation (E&Y-FICCI, 2014). According to the Report of the Working Group on private sector participation for the Eleventh Five Year Plan (GOI, MHRD-Planning Commission, 2011), among the many tiers of schooling in the government system, the cost per year per child varies from approximately INR 900 under SSA (Sarva Shiksha Abhiyan), to INR 2000 in municipal corporation schools, to INR 8000 in government schools, and INR 20000 in Kendriya Vidyalayas.

On the other hand, the TSR Subramanian Report (2016) [GOI, MHRD, 2016] on New National Education Policy observed:

"...It is understood that a large number of 'low-budget' private schools primarily in rural areas are anxious to go even well beyond the 25% minimum quota, mainly because their average costs are far below the costs of the common (Government) schools; they perceive an arbitrage opportunity to financially gain through different cost structure- note that most common (Government) schools follow relatively high pay-commission based compensation structure, as compared to much lower emoluments in the low budget schools. This is clearly an unintended aberration; a measure intended to benefit the socially backward classes is being used by certain private schools for monetary gains."

Earlier, Kingdon (2008) had made similar remarks: "...Since per pupil expenditure in public schools is much larger than fee levels in most private schools...the Act's(RTE) stipulations could well affect (eg. generally increase) private school fee levels, in a bid by such schools to claw higher revenues from the Government. "

## 5. Role of transnational corporate philanthropy and private foundations in shaping global education policy

**5.1 Corporate Philanthropy**: Corporate philanthropy refers to any philanthropic, corporate social responsibility, citizenship, grant making or community involvement activity or investment implemented by a corporation or associated corporate foundation or trust (Adapted from van Fleet, 2012).

Corporations have three types of assets, financial, real and intangible that in turn produce three 'objects of contribution'. Financial assets allow the firm to contribute money; real assets allow the firm to contribute tangible property to the community; and intangible assets include contributing employee time and expertise (Valor, 2007, p.290).

Corporate philanthropy exists at the convergence of two interests: business and philanthropy. The term used to describe the potential for corporate activities to have a mutual benefit by creating business success and addressing social challenges is 'shared value' (Porter and Kramer, 2011).

Justin van Fleet, in a survey of 41 Fortune 500 US corporations (van Fleet, 2012), identified the following corporate interests in making philanthropic contributions

1 anticipating global market opportunities
2 strengthening community relationships
3 empowering and engaging employees
4 developing a workforce in the current communities of operation
5 brand recognition
6 innovating with products
7 fostering greater economic opportunity among consumers/potential consumers
8 creating demand in public and private sectors

Draxler (2008) enumerates the following corporate objectives in PPPs involving business corporations

1 enhanced corporate image
2 closeness to public sector decision makers in a non-commercial setting

3 development of customer loyalty among programme beneficiaries
4 market penetration at reduced costs
5 reduced scrutiny compared to contractual activity
6 easy access to information about public sector planning

Zammit (2003) also dwells on potential motivations and conflicts of interests of corporate partners in PPPs, arguing that "partnerships to undertake development-related tasks in countries of the South...also provide opportunities for corporate image enhancement, vehicles for market penetration by providing already powerful enterprises with preferential access to developing country markets, and other means of increasing competitive advantage and policy influence, for example, through privileged access to developing countries' governments".

Levy (2006) argues that essential services should be provided by the Government and not by philanthropy, as corporate philanthropy will tend to favour particular countries, interests and regions, as opposed to the society at large. Justin van Fleet's survey of US Fortune 500 corporations did find that half of them contributed to emerging economies like India, China and Brazil, which offered enormous future market potential for their products. Among the corporations surveyed, the highest mean contribution to education in the developing world came from corporations in the energy industry (US $ 14 million) and the technology sector (US$10 million) [van Fleet 2012]. All things being equal, corporate philanthropy motivated by business opportunity can be expected to gravitate to communities with higher disposable income, thus perpetuating existing inequalities among and within countries.

Valor (2007, p.281) suggests that corporations have no legitimacy in the provision of public goods, 'given their obvious democratic deficit and their lack of accountability'. The low level of coordination between corporations surveyed by van Fleet with host Governments in the countries chosen for their philanthropic activity, validates arguments in Draxler (2012) about the lack of focus and direct of funding to national priorities as set out by national governments. The study documented 50 corporate philanthropy programmes acting independently of each other, operating in 114 countries, with fewer than 25% of the corporations surveyed reporting any coordination with the host governments (van Fleet, 2011). This can blur the lines of accountability as to who is responsible for education in developing countries, especially in the presence of public private partnership arrangements. Edwards (2008) suggests that citizens'

groups are no longer able to promote a system of checks and balances with their own governments.

As for the philosophy of education, some of the functions of education in a democratic state include cultivating character and developing skills to participate in democratic politics, establishing a foundation for livelihoods and sharing in communities (Gutmann 1987). Corporate philanthropists place a greater emphasis on the livelihood component of education, cultivating employable skills, rather than on democratic participation in communities (van Fleet, 2012). Giroux (1998) warned that allowing corporations to have any influence in the management of public schools or in the content of the curriculum would lead to corporate values threatening the democratic purposes of public education.

The average annual contribution of US corporations to education in developing countries is estimated to be just under half billion dollars (van Fleet: 2011 a, b). In aggregate, US corporations constitute the seventh largest donor to education in developing countries, after the World Bank's International Development Assistance (WB-IDA), France, Germany, the US, the Netherlands and Japan (van der Gaag and Adams, 2010). 64% of these US corporate donations flowed directly from the corporations themselves, and 35% from the associated foundations; the funds were typically directed to non-profits in the developing countries; 70% of the donations were in cash and 30% in kind (products/professional services) with much of the donations from the technology sector falling in the latter category (van Fleet, 2012).

We shall discuss in more detail, in the following section, the contributions and involvement of technology giants like Microsoft, Intel, Cisco and Google in shaping the global education landscape, especially in the developing world through corporate philanthropy.

In India, corporate foundations such as the Bharti Airtel Foundation, and private foundations like the Tata Trusts and Azim Premji Foundation set up by founders of major business groups with the purpose of devoting revenues from their businesses to matters of public interest, have made enormous contributions to the education sector.

This leads us to our next discussion about enormous private foundations set up by founders of transnational technology corporations, in the tradition of the Big Three US Foundations- Ford, Rockefeller and Carnegie, but with an entirely new approach to philanthropy known as venture philanthropy or philanthro-capitalism.

**5.2 <u>Private Foundations</u>:** Philanthropy and the role of private foundations in development and in education have assumed enormous importance with the emergence of mega donors like the Bill and Melinda Gates Foundation, William and Flora Hewlett Foundation, the David and Lucille Packard Foundation and the UN Foundation (Adelman 2003; Robertson and Verger, 2012 ), known for the sheer scale of their development initiatives worldwide. There is an increasingly accepted view that global philanthropy and private foundations can fill the gap in Overseas Development Assistance (ODA) by official agencies in developed countries, especially post the 2008 financial crisis. "Global philanthropy and remittances will play the most important roles in helping developing countries weather the financial crisis that began in 2008. Official Development Assistance (ODA) though important for the less than 25 percent of the countries whose official aid exceeds 10 percent of their Gross National Income (GNI), represents only 17 percent of total financial flows from developed to developing countries" (Center for Global Prosperity (CGP), 2009, p.5). However, statistics suggest that only 10% of the US private foundation grants went to international development (DECPG[12], 2006, pp 3-4); 45% of the international grants went to BRICS countries (World Bank, cf Edwards 2009); only 10% of the international grants were for education (while 40% went to health, a Gates Foundation priority) [US Foundation Center, 2008].

The terms 'venture philanthropy' and 'philanthro-capitalism' have recently emerged in the literature to describe models of giving by the newer groups of global foundations like the Gates, Hewlett and Packard Foundations. These models involve a business or entrepreneurial orientation. According to Scott (2009), 'venture philanthropists', while emphasising the improvement of education for the poor, fund programs that utilise market language for social exchanges, and expect aggressive returns on their investments. 'Philanthrocapitalism' as defined by Edwards (2009, p.35) is 'the use of business and the market to transform philanthropy and foreign aid'. There is an emphasis on intervention and control by the donor as a key factor in successful programmes stemming from a belief that the market model has the best chances of succeeding (Srivastava and Su-Ann Oh, 2012). Bishop (2008, p.39) declares that philanthropic donors 'now have an opportunity to seek change by becoming like "activist shareholders" pushing for a greater focus on results, and on restructuring the non-profit world

[12] DECPG- International Finance Team Development Prospects Group of the World Bank

to create institutions capable of delivering it". However, Edwards (2009) maintains that the application of the market-based model is questionable in addressing more difficult issues of inadequate infrastructure, unequal distribution of resources, political instability and social inequality.

Recently established large foundations from technology giants, such as Gates and Google Foundations, and organised philanthropic giving by Silicon Valley Corporations rest on an approach that is problem-oriented (Marten and Witte, 2008) and focuses on "results", usually defined in terms of short term, measurable, material outcomes (Edwards, 2009, p.36). The OECD (2003) report on philanthropic foundations and development cooperation, asserts that even the older foundations like the Ford, Rockefeller and Carnegie Foundations had such a technocratic approach to grant making.

Adelman (2009, p.24) claimed that "...in all its forms, private philanthropy tends to focus more on local ownership of projects, transparency, accountability, sustainable outcomes, and efficient delivery of services". There is however no systematic evaluation that has established any of this to be true. The 2008 Index of Global Philanthropy (CGP 2008, p.10) noted: " Private donors still lack rigorous assessment of their results. Too often evaluation consists of looking at what was delivered to a grantee, not what finally happened with the goods and services".

Arnove and Pinede (2007, p.393) spoke of the international work in education, of the Big Three US Foundations- Ford, Rockefeller and Carnegie, as being vested with the interest of spreading a new form of imperialism by "...supporting changes that help to maintain and make more efficient an international system of power and privilege. Although these foundations claim to attack the root causes of the ills of humanity, they essentially engage in ameliorative practice to maintain social and economic systems that generate the very inequalities and injustices they wish to correct".

The move towards PPPs in the UN system had involved significant contributions from the Gates and Hewlett Foundations, and it is difficult to determine whether they actually contributed to the UN's development goals, or merely seized new opportunities for the associated businesses (Bull 2010; Robertson and Verger, 2012).

In India, the Central Board of Secondary Education (CBSE) entered into a PPP with Pearson Foundation to establish the Centre for Assessment Evaluation and Research (CAER) in August 2012, to develop research and assessment capabilities for CBSE, its network of 13000 schools

and tens of thousands of teachers. It was to focus on international best practices in school-based assessment, teaching techniques and high-stakes examinations. While Pearson Foundation was to absorb the operational expenses of the centre, including salaries, in the initial two-year phase, the centre was expected to begin generating its own revenue thereafter and become financially independent within the next three years through various projects and activities like performance assessments, audit and evaluation of assessment systems including recently introduced Continuous and Comprehensive Evaluation (CCE) in schools. Note that Pearson's business in online instruction and assessment products and services had grown two-fold during 2007-2013, due to a strategic shift of focus from textbook publishing and sale, to digital products and services. Hence, Pearson was growing its market for these products in India, through this PPP involving its Foundation arm. This market was not restricted to CBSE schools as Pearson's expertise in 'normalising' scores across multiple school boards in India (CBSE+22 State Boards) was considered valuable for making the engineering college admission process equitable (Livemint, August 10, 2012).

In the US, Pearson Foundation, along with the Gates Foundation, was hugely influential in the development of Common Core State Standards (CCSS), a form of national curriculum in certain subjects, and Pearson Education stood to make significant profits through the sale of textbooks and online courses linked to it. Pearson Foundation did develop a set of CCSS-aligned online courses, in partnership with the Gates Foundation (Rothman, 2011). It appears that there is no daylight between the business and philanthropic arms when it comes to pursuit of goals; business interests are often prepossessing, and business strategy drives philanthropic priorities.

According to Scott (2009): "Wealth that comes largely from favorable public policies is now directed into mostly tax-exempt foundations, where trustees and philanthropists directly shape public policy for the poor, without the deliberative process that may have been involved over school reform policies were the money in the public coffers".

## 6. Education in the 21st century: New Frames, New Actors

**6.1 21st Century Learning:** According to Trilling and Fadel (2009), four powerful forces are converging and leading us towards new ways of learning for life in the 21st century

- Knowledge work - increasing demand for knowledge workers and innovators that businesses need, to be successful in the knowledge economy of today
- Thinking Tools - new technology, devices and services that comprise a knowledge worker's equipment
- Digital lifestyles - different ways of delivering, watching, hearing, entertaining, communicating or solving everyday problems
- Learning research - our recent better understanding of how people learn

Trilling and Fadel (2009) declare that new ways to make learning interactive, personalised, collaborative, creative and innovative are needed to engage net generation children to be actively learning in schools. The authors have this to say about the demands of work in the 21st century (*ibid*, p.24): "The 21st century has already brought historic changes to the world of work. The Knowledge Age demands a steady supply of well-trained workers- workers using brainpower and digital tools to apply well-honed knowledge skills to their daily work. Today's knowledge work is done collaboratively in teams, with team members often spread across multiple locations, using a digital zoo of devices and services to coordinate their project work..."

21st century skills include (i) ways of thinking (creativity, critical thinking, problem solving, decision making and learning), (ii) ways of working (communication and collaboration), (iii) tools of working (information and communications technology (ICT) literacy), (iv)skills for living in the world (citizenship, life and career, and personal and social responsibility).

[Assessment and Teaching of 21st century skills (ATC21S), a group of more than 250 researchers across 60 institutions worldwide; cf UNESCO-IITE, 2012].

The National Educational Technology Plan of the US Department of Education (2010) states: "Whether the domain is English Language Arts, mathematical, science, social studies, history, art as music, 21st century competencies and expertise such as critical thinking, complex

problem solving, collaboration and multimedia communication should be woven into all content areas".

Partnership for 21st century skills (P21)[13] categorises 21st century skills into (i) learning and innovation skills (critical thinking and problem solving, communication, collaboration, creativity and innovation), (ii)information, media and technology skills (information literacy, media literacy and ICT literacy), (iii) life and career skills (flexibility and adaptability, initiative and self-direction, social and cross cultural skills, productivity and accountability), (iv)leadership and responsibility (to the community).

[AACTE-P21 (2010): American Association of Colleges of Teacher Education (AACTE) and P21, September 2010]

The AACTE-P21 paper, "21st century knowledge and skills in Education Preparation", also stresses 21st century inter-disciplinary themes such as global awareness, financial, economic, business and entrepreneurial literacy, civic literacy, health literacy and environmental literacy. It asserts that the 21st century curriculum must enable innovative learning methods that integrate the use of supportive technologies, inquiry- and problem-based approaches to learning and higher order thinking skills.

**6.2 <u>Knowledge Economy</u>**: "The most significant political and policy development over the past decade- the current financial crisis aside- is the emergence, globally, of a new, very powerful, discursive imaginary; the assertion that we now live in, or are moving toward, a knowledge-based economy, and that the recalibration of institutions (mergers), and their desirable geographies (e.g. regions/cities), are crucial to enable this to be realized" (Robertson, 2009, p.1). Efforts to develop new narratives, ideas and constructs around the knowledge-based economy were stimulated by Western Governments and international organisations like the World Bank and the OECD (Robertson, 2008b). OECD developed indicators to guide and measure country efforts towards a knowledge-based economy, that were based on innovation, new technologies, human capital and enterprise dynamics (OECD 1996). Similarly, the World Bank's Knowledge and Development Programme was based on four pillars that included an economic and institutional regime, an educated and skilled population, an efficient innovation

[13] The Partnership for 21st century skills (P21) has emerged in the United States as a leading advocacy organisation focused on infusing 21st century skills into education. It brings together the business community, education leaders and policy makers. Its current Board member organisations include, besides the National Education Association (NEA, the oldest and the prominent teachers' association), the Education Testing Service (ETS), and the American Association of School Librarians, corporations like Apple, BlackBoard, Pearson, McGraw-Hill, Dell, HP, Ford, Microsoft, Verizon and Lenovo, and Intel Foundation and Oracle Education Foundation. Its strategic partners include the all-powerful Council of Chief State School Officers (CCSSO, recently the prime mover behind the Common Core State Curriculum Initiative), and the International Society for Technology in Education (ISTE).

system, and ICTs (King 2002). The ICT sector is a key driver of knowledge-based economies. The focus on ICTs in education has increased, given the push towards stimulating knowledge-based economies globally (Bhanji 2012). Castells (2000) argues that globalisation has placed a premium on ICT skills, given the increased demand for high productivity and a skilled labour force to attract foreign investment and compete in global markets.

Knowledge-based economies have also stimulated the greater involvement of non-state actors including transnational corporations working in education, such as Pearson, Cambridge Consultants, Edison and deVry. Nation states increasingly work with other autonomous Education Service Providers (ESPs), or primarily as regulators of privately provided services (Dale 1997; Hill 2005).

**6.3 Digital Technologies and Education:** Information and Communication Technology (ICT), used in the context of education, refers to a collection of computer-based technologies which are exploited to support teaching and learning, communication and collaboration, self-expression and creation, to promote all developmental domains of children of all ages. It is important to distinguish the idea of learning through using ICT in a range of curricular topics, also known as e-learning or technology-enhanced learning, from learning how to use ICT in different areas, the latter known as digital literacy which is seen as a core competence to everything teachers and learners do. ***E-learning*** places the focus on using technology to solve the different problems in education such as learning difficult concepts and skills, learning in a challenging context, or reaching the most difficult-to-reach learners. Hence, the role technology plays is pedagogic and logistical- changing the pedagogy to enable learners to learn in a more active, collaborative or more engaging way, and changing the mode of learning to a more flexible (potentially online) delivery mechanism. ***Using technology to improve the quality and reach of education***, to improve attainment levels and to increase access, requires teachers and education leaders to be able to use the digital resources that they have in new and imaginative ways ***to help learners achieve what is impossible without the use of technology***. For instance, India's State Institutes of Education Technology (SIET) play a regional role in providing satellite broadcasting of education programmes to remote areas, and also in producing educational audio/video software for primary schools (UNESCO-IITE, 2012).

The role of ICT in primary education is to facilitate better instruction through tools for creative self-expression to support children's learning and thinking processes and special education needs. ICT may serve various roles in schools for enhancing student learning. Lim and Tay

(2003) classified ICT tools into four types: (i) informational tools (applications that provide information in various formats, (ii) situating tools (systems that 'situate' students in an environment where they may 'experience' a context, e.g. Virtual Reality), (iii) construction tools (tools used by students to manipulate information, organise one's ideas or represent one's interpretations), and (iv) communication tools (tools that facilitate communication between teacher and students beyond the physical barriers (of space/time/both) of the classroom, e.g. asynchronous tools such as emails and e-discussion boards).

With the help of the internet, and technologies for communication, visualisation and simulation, students today can be offered a more authentic learning experience. Mobile technologies allow interaction in text messaging and access to the internet any time any place. Hartley (2007) explains the use of digital cameras, video projectors, electronic whiteboards, virtual environments, mobile technologies and various types of control switches in teaching and learning. Miller and Robertson (2010) found that using computer games led to significant gains in general self-esteem and high speed of computation in primary school children. However, Merchant (2010) cautioned that more attention needed to be paid to broader social contexts in which computer games operated. As Merchant found, students may be unwilling to transfer what they acquire in the virtual world to the real world. Chang *et al.* (2010) noted that sometimes students might prefer interacting with physically real teaching materials rather than virtual materials.

Increasingly, adventure games and simulations software are being developed and adapted for early year settings as well as for primary schools which allow children to create and make decisions about changes in images, text and sound effects of stories, and to support activities away from the screen (Siraj-Blatchford and Smith, 2011). Trials carried out in developing the *Supporting Playful Learning with Information and Communications Technology* (SPLICT) in the Early Years Project in Swansea (http://www.playthinklearn.org ) have shown that such gaming software has the potential to be both stimulating and motivating for younger children to engage in, especially with close adult/older peer support.

A strong case can be made for ICT in early childhood, simply in terms of collaborative applications of high quality software, but the value of sustained adult-child shared computer activity leading to enriched home learning environments and 'sustained shared thinking', both of which have been demonstrated to contribute to long term educational achievement (Sylva *et al.*, 2008, 2010), strengthens the argument. Young children have also been shown to benefit

significantly from enriched language environments, and early childhood software has been shown to support the development of vocabulary with significant implications for language development in children (Siraj-Blatchford and Smith, 2011).

Computers also provide a means by which young children may be supported in their manipulation of symbols, as representations on the screen allow them to distance themselves from objects in a way that supports the processes of verbal reflection and abstraction (Forman 1989).

Bowman *et al.* (2001, p.229) strongly endorse the application of computers in early childhood: "Computers help even young children think about thinking, as early proponents suggested (Papert 1980). In one study, pre-schoolers who used computers scored higher on measures of metacognition (Fletcher-Finn and Suddendorf, 1996). They were more able to keep in mind a number of different mental states simultaneously and had more sophisticated theories of mind than those who did not use computers".

UNESCO's Institute for Information Technologies in Education's (IITE) Report, "ICT in Primary Education-An Analytical Survey", Vol.1, 2012 (UNESCO-IITE,2012), which surveyed policy approaches of several nations to ICT in primary education, found one common noticeable feature in all national documents perused. While there were references to the need for teacher participation in the development of digital content, and their needed training for the use of technology to improve learning processes, there was no discussion on the need for providing teachers with the time to develop and innovate with ICT. Studies have shown that without additional time and a link to personal reward, it is difficult to change teacher behaviour (Dowker: 2003,2009).

The National Policy on Information and Communication Technology (ICT) in School Education, MHRD, Government of India (GOI, MHRD:2009), has this to say on teacher engagement: "Beginning with an initial sensitisation through ICT operational skills, teachers will become part of online professional groups (e.g. the English teachers' association) to continue their education, pool in their resources and actively contribute to the strengthening of domain specific knowledge within the country...Teacher participation in digital content development process will catalyse its broad-based usage in classrooms. Teacher capabilities will be developed in instructional design, selection and critical evaluation of digital content, and strategies for effective use of digital content to enhance student learning".

National documents also did not seem to make a distinction between digital literacy and e-learning. And, while most of the documents addressed the matter of ICT competency standards for students and teachers, assessment reform appeared to be less in focus. Formal assessment methods need to change to accomodate new digital capabilities students are learning, and it is now possible to assess learning by assessing student portfolios, their project-based learning and activities that use ICT in a way that emulates real world work. Schools and students both focus on the requirements of the assessment system, since this is the basis on which they are judged. So, ICT will be seen as important only if the assessment system uses ICT skills to evaluate learning (Tan 2011). The Partnership for 21st Century Skills (P21) also calls for 21st century assessment of 21st century skills: a balance of technology-enhanced formative and summative assessments that measure student mastery of 21st century skills, including student work portfolios that demonstrate such mastery, in addition to high quality standardised testing (AACTE-P21, 2010).

**6.4 <u>Role of technology giants in reshaping education worldwide</u>** : As the World Bank has been advocating its Knowledge for Development theme and the OECD has taken to assessing economies based on their progress towards becoming knowledge-based economies, even as UNESCO and other UN organisations have been promoting the inculcation of so-called 21st century skills in the youth of today, they have all been influenced and supported by transnational technology giants like Microsoft, Intel, Cisco, IBM and HP, and their associated foundations in these initiatives. These technology corporations have their own global education programmes in which ICT/digital technologies play a central role, and they have also undertaken many initiatives in partnership with international organisations as well as with national and sub-national governments around the world.

According to Draxler (2012), the majority of the education development partnerships that are not in the nature of strict contracting out of services by the public sector (e.g. building schools, providing textbooks, catering, running charter schools), is in the field of technology. According to Bhanji (2012), companies in this area have both expertise and interest in aiding the emergence of a technology-savvy generation, through the use of ICT in teaching and learning and through ***training young people to use technology in ways that will make them employable and productive***.

The United Nations solicits the support of the private sector for development, especially from the technology industry (UN Press Release SG/SM/8037 and DEV 2354, November 20, 2001):

" [S]upport from the private sector will be particularly important. Fortunately the use of ICT for development is one of the areas where the long term interests of the international community, governments and private business most obviously coincide. Empowering the poor and marginalized can unleash vast creative energies. It can help level the playing field for entrepreneurs and for small- and medium-sized businesses. And it can expand and create new markets. ***Private companies can, in short, do well by doing good***" ( emphasis added; cf Draxler 2012).

Nation states increasingly negotiate policy with new transnational actors such as foundations, NGOs, international organisations and private corporations. In particular, transnational corporations within the technology sector are increasingly being encouraged to bridge the digital divide in education through collaborations with international organisations or individually. They are virtually being invited to deliver their products, services and expertise, thus creating new markets and business opportunities for them within the education sector around the world. Some of the most prominent ePPPs are in the technology sector (Bhanji, 2012).

The interlinked roles of transnational corporations and nation states operate under new 'generalized principles of conduct' which are mediating the work of the private sector within multilateral institutions, also termed 'market multilateralism' (Bhanji 2008; Bull and McNeill 2007).

**Microsoft Corporation** has been working in the educational arena since 1986. But it found that traditional sales models alone could not meet the unique needs of the education sector. Purely philanthropic donations had not worked either, in developing Microsoft's educational marketplace niche. The company realised that education, being in the public sector, had very different needs and it had to respond to those needs. Ultimately, it was the culmination of new global norms about bridging the digital divide, the increasing popularity of PPPs, external pressures on the company to play a more significant CSR (Corporate Social Responsibility) role in education, and concurrent internal pressures to change its approach to the education market, that led Microsoft to establish ePPPs through its worldwide ***Partners in Learning (PiL)*** programme, starting in 2003 (Bhanji, 2012). However, let's not lose sight of the role that the Gates Foundation played in shaping the global environment especially its funding of the shift in approach to PPPs within the UN system, as mentioned earlier.

Microsoft's Partners in Learning (PiL) programme is a global initiative designed to increase technology access for schools, foster innovative approaches to teaching, and provide education leaders with tools to better engage students and improve learning outcomes (Microsoft Corporation, cf EI, 2009). Under its PiL programme, between late 2003 and mid-2005, Microsoft entered into 200 Memoranda of Understanding (MOU) with various national/state/provincial governments across the world. In 2003, PiL was launched in Jordan, South Africa, Brazil, Canada, France, Germany, **India**, Japan, Namibia, Russia, Taiwan, Thailand and the UK; in 2004, in China and Malaysia (Bhanji 2012).

The following is a sample of PiL's strategic aims as set out in these MOU: "To prepare students in...schools for the ***knowledge economy*** ; to substantially ***raise the level of digital literacy*** with students, teachers and the wider community; to help develop a culture of Innovators; to assist in building a sustainable ICT model for education" (Excerpt from Microsoft's MOU with the Government of Jordan; Source: Microsoft Corporation, 2003; cf Bhanji 2012. Emphasis Added).

With this following snippet, Microsoft (2006) amplifies its vision for implementation of PiL: "Empower schools to help improve student achievement by applying resources such as services, products and people at the local level. By partnering with students and government we aim to set a new high standard for ***digital inclusion*** for students and work with schools to ***prepare students for the digital workplace***; empower educators to ***raise the level of ICT literacy*** in their institution and support teachers and schools in developing innovative cultures" (cf Bhanji 2012; emphasis added).

Microsoft has developed, since 2004, an elaborate organisation structure for PiL, and has applied considerable financial and human resources every year since, for its implementation worldwide. It has made its core educational tools available to schools at discounted prices and has, through its PiL grants, funded ICT skills training for teachers and students, jointly with local governments, to build ICT capacity in learning communities. And wherever possible, it has also entered into national agreements to provide software access to all schools. It can be argued that Microsoft's aim through its PiL programme is to further its business interests to stimulate the commercial use of its software in schools (Bhanji 2012). In just the first seven years of the programme, Microsoft invested US $500 million worldwide, helping 8 million educators and reaching 190 million students in over 114 countries (Microsoft India, 2015).

Even as Microsoft implemented its global education programmes after wideranging consultations with governmental and non-governmental stakeholders, its business interest to spread the use of its products to the extent possible always reigned paramount and could often be in conflict with the goals and priorities of the nations where the programmes were introduced. For instance, Draxler (2012) speaks of the high cost to the Rwandan Government of Microsoft-sponsored One Laptop per Child (OLPC) programme, which entailed the procurement of these laptops at $200 per unit (Negroponte, 2007). Draxler suggests that these funds could have been used instead for many other priorities like recruiting more teachers, increasing access, improving school amenities and so on, in a poor country with scarce resources. Moreover, the OLPC programme has not been found to be effective in terms of improving student learning outcomes in other countries where it had been introduced. Results from a large scale randomised evaluation of OLPC's effectiveness in Peru (Cristia *et al.*, 2012) found "no evidence that the program increased learning in Math or Language" but did show "some benefits on cognitive skills...Estimated impact on the verbal fluency measure represents the progression expected in six months for a child. Similarly, the estimated impact for the coding and raven tests accounts for roughly the expected progression during five and four months respectively". In other words, there was no incremental benefit from the introduction of OLPC. The study sampled from 319 public schools in rural Peru, and it evaluated "academic achievement in Math and Language and cognitive skills as measured by Raven's progressive matrices (non-verbal), a verbal fluency test and a coding test".

In India, Microsoft's PiL programme, known as Project Shiksha, has trained more than 760000 Government teachers in IT skills, impacting more than 38.2 million students (Microsoft India: 2015).

In May 2015, Microsoft India launched Edu-Cloud, a cloud computing-based offering, which was expected to benefit 10 lakh teachers and 60 lakh students across 1500 institutes across the country. Edu-Cloud supports students, teachers and school administrators through virtual learning platforms, easier content access, discussion boards, cloud storage, analytics and dashboard for learning outcomes, monitoring and improving teacher pedagogy, and creating custom-learning modules. Edu-Cloud in India, offers access to 600+ e-learning courses in Microsoft Imagine Academy, which trains and certifies students and educators in Microsoft products and technologies.

In another move, in May 2015, Microsoft India entered into a partnership with Sri Chaitanya Schools under PiL, to train 800 teachers within their chain of schools, as the group embarked on its digital classrooms project. Sri Chaitanya Schools adopted Microsoft's Edu-Cloud infrastructure and procured 14000 Windows-based tablets for their students and teachers for classes 3-5 in 80 schools, to connect, collaborate, create and share content, to make teaching and learning more fun. To drive education reform across their schools, the group also decided to participate in Microsoft Innovative Schools Programme and Microsoft Educator Network.

During the previous ten years (2005-2015), Microsoft had invested over INR 160 crores in education, skill development, entrepreneurship and digital literacy programs, touching more than 5 crore people in 20 states across India. http://www.microsoft.com/about/corporatecitizens/youthspark

**Intel Corporation**, the chip making giant, has been another player on the global education scene, with deep involvement in education policies and practices across the world. The Intel Education Initiative, with Intel Teach as its flagship programme, began in 1996. Intel Teach was launched with the purpose of improving K12 teachers' effectiveness by providing them with a professional development programme, helping them to integrate technology into their lessons, and promoting students' 21st century skills including problem solving, collaboration, and critical thinking skills. Since its launch, until 2012, Intel had reached 10 million teachers in 70 countries. Teachers attending Intel Teach training are provided with knowledge to help them transform instruction to engage students with appropriate use of technology, web resources and social networking to foster learning, creativity and communication. The programme supports project-based approaches to learning and multiple forms of assessment (with a library of teacher-created assessment resources).

[ UNESCO-IITE, 2012]

Other components of the Intel Education Initiative include the Intel Learn Programme and the Intel Computer Clubhouse Network, both after-school or community programmes that teach technology literacy and problem-solving skills to underserved youth globally (EI, 2009). Intel Learn is delivered in informal, community-based education settings, and provides a provides a project-oriented hands-on approach for young learners from underserved communities in developing countries to learn 21st century skills (Center for Education Innovations, February 2, 2015;

www.educationinnovations.org/program/intel-®-learn )

In India, Intel has partnered with governments, local NGOs and academic institutions through its various programmes, Intel Teach, Intel Learn, skoool, Intel Community Outreach and Voluntary Matching Grant Programmes (Digital Learning, January 1, 2011).

Intel Learn was launched in India in 2004 and is being implemented across 22 States and 5 Union Territories. It is a programme that extends learning opportunities beyond the classroom using a project-centered approach. It was developed in India, in collaboration with governments and NGOs to ensure the effective use of technology among youth aged 8-25 years in underserved communities. Delivered through local community centres, the program includes a learner curriculum and structured training for community center staff. The staff (teachers') training consisted of 30 hour face-to-face hands-on training focusing on programme, pedagogy, methodology and classroom management. The student's (learner's) training consisted of a 30-hour training to be completed in 15 two-hour sessions with trained staff facilitating the sessions. Beyond digital literacy, the curriculum focuses on collaborative and critical thinking skills. The programme encourages participants to identify problems in their own communities and apply technology to seek solutions. The Intel Learn Programme is comprised of three modules: Technology and Community, Technology at Work, and Technology & Entrepreneurship. (Center for Education Innovations, February 2, 2015;

www.educationinnovations.org/program/intel-®-learn )

In December 2010, Intel partnered with UNESCO to launch an ICT in Education Policy Toolkit at a national forum in India; the toolkit aimed to help state-level policy makers, planners and implementers in designing state specific policies to support education transformation (Digital Learning,January 1, 2011).

Recently, in an effort to contribute to "Digital India", Intel India launched an initiative to strengthen the use of technology in the country's education ecosystem. The company said it was collaborating with leading device manufacturers, digital educational content publishers and Education Service Providers (ESP) to build end-to-end solutions promoting the use of technology in India's education sector. As part of the collaboration, Intel decided to make available its Pentium A1020 processor to leading device manufacturing partners like Acer, HP, Dell, Lenovo, Micromax, Datamini and iBall; the processor was expected to deliver power savings and was considered optimal for devices designed for running education applications in

semi-urban and rural India. Intel declared that it would help deploy management solutions for schools, classrooms, content and learning, and also manage school information systems.

(ET Tech, Economic Times, May 14, 2016)

The **IBM** KidSmart Early Learning Programme is another notable global initiative, of particular relevance to our discussion. Launched in 1998, it seeks to integrate interactive teaching and learning activities into the pre-kindergarten curriculum, using the latest technology. The KidSmart package includes the Young Explorer, a computer housed in brightly coloured child-friendly Little Tikes furniture, preloaded with curated educational software to help children learn and explore concepts in mathematics, science and language, through 'playful learning'. In the first thirteen years of the programme, IBM invested more than USD 120 million, donating more than 55000 Young Explorers to schools and non-profits in 60 countries, reaching more than 100000 teachers and serving more than 10 million students (Blatchford and Smith, 2011).

IBM India Ltd. was established in 1999, although IBM had been present in the country since 1992 via a joint venture. IBM KidSmart Early Learning Programme was launched in India in the year 2000 with a pilot rollout of 50 Young Explorer units, 40 units to 20 SOS Children's Villages (a non-profit organisation that commenced operations in Ludhiana in India, based on the model of SOS in Austria, and then spread across several states), and 10 donated to 10 Anganwadi centres under the Directorate of Women and Child Welfare, Government of Karnataka. The objective was to address some of the most significant issues in Indian school education- the disconnect between pre-primary and primary school education, high dropout rates in schools and lack of educational infrastructure. IBM leveraged its core strengths to reach the power of technology to 15000 children in the first three years after the launch of the programme. During that period, 570 Young Explorer units were donated by IBM across 67 centres mainly in Karnataka, Tamilnadu and Maharashtra; another 310 units were slated for dispatch to 35 new centres in 2004 (Source: IBM India, 2003 - "Bridging the Digital Divide through IBM's KidSmart Early Learning Programme").

The pedagogical objectives of the programme are to improve reading and comprehension skills, technology skills and craft skills of young underprivileged children, and is the most prominent programme in India to introduce technology to children at the pre-school level. A wide range of schools were brought together under the programme - Anganwadis, Government schools, Corporation schools, Army schools, Navy schools and trust-run schools, among others. The

programme does not end with the donation of the Young Explorer units, but also includes teacher training, project support and monitoring. Within the first five years, the programme had a learning network of 250 teachers who interacted and communicated with each other to exchange, discuss and develop creative resources and materials to develop reading skills in students. For India, a unique model was developed based on the concept of "Host and Neighbourhood Schools". In this system, the KidSmart Early Learning Centre serves as a community resource, not only available to the school where the centre is hosted, but to all neighbouring participant schools. The programme in India was conceptualised and structured by the Promise Foundation, a Bangalore-based NGO, and implemented with the support of local partners in every region.

(IBM India, Bangalore, 2003).

It is pertinent to cite here, Barbara Rogoff's (2003) argument in favour of context-specific innovations for greater success:

"...notions of change and sustainability can co-exist if communities are given the opportunity to develop early childhood educational practices which work towards collaboratively formed goals in culturally relevant ways. Innovations can take place, but these innovations need to be meaningful to both teachers and learners if they are going to develop the sense of agency, ownership and confidence required to empower individuals and communities to bring about positive and sustainable community development".

In this context, several local language (standard Hindi) software are now available through Matrubhasha, India (www.matrubhasha.com), for use under the KidSmart programme. These include Mulakshar (the alphabet), Rang (colours), Sankhya (numbers), and Aaakrityon (shapes) [Blatchford and Smith, 2011].

On September 4, 2011, the Pratham-IBM KidSmart programme, a partnership between Pratham Infotech Foundation (Pratham), IBM and the Government of Rajasthan was launched in Ajmer, Rajasthan. As part of this partnership, IBM installed 100 KidSmart units in Ajmer and Jaipur districts in Rajasthan, set to benefit 20000 children in the age group 6-13 years in these districts. Pratham was to assist the Government of Rajasthan in technology management, educational software, teacher training, monitoring and evaluation. Earlier, 70 Government school teachers had been trained by Pratham in educational technologies and computer-based teaching practices under its Teaching Effectiveness Programme. The partnership under

discussion was to introduce to children, at an early age, and to their teachers, various computer-based tools and techniques to facilitate competency-based learning, classroom teaching, teaching material development, student record management and content collection through online sources.

(Pratham Infotech Foundation, 2011;

http://pif.org.in/whatwedo/ComputerAidedLearning/IbmKidSmart.aspx )

The publishing and education giant, **Pearson**, has, over the past decade, increased its involvement in digital products and services in education. Under Dame Marjorie Scardino, its CEO from 1997 to 2013, Pearson's strategy was redefined based on three pillars: ***engaging in digital transformation of education***, moving into the service business (a shift from its principal focus on supply of textbooks), and building a presence in emerging markets (Pearson Annual Report, 2012). From 2007 to 2013, Pearson's revenues from digital products and services doubled (Pearson Annual Report, 2013). In India, apart from launching a chain of schools for direct delivery of education, Pearson also invested in startup ventures that used digital technology that enhanced quality of education received by the bottom of the pyramid (BOP) students. In September 2013, its venture fund Pearson Affordable Learning Fund (PALF), made a small investment of $50000 in *Experifun*, which created a low cost interactive learning platform called *Caboodle*, for both teachers and students in Grades 6 to 10. In May 2014, PALF invested $480000 in an early stage round for a 20% stake in *Zaya Labs*, an Indian educational technology and services company. Zaya created a back-pack sized LabKit aimed at both private and public schools that contained all the elements needed to set up a Zaya Learning Lab where children divided their time between traditional classroom interaction, peer-to-peer group work, and digital engagement via tablets. By 2014, Zaya had contracts with 27 schools in India, with plans to expand its reach to 500 schools in the next four years

(Pearson: Affordable Learning; http://www.affordable-learning.com )

[Chu, Dessain and Maslauskaite, 2015; HBS Cases]

We now turn to the phenomenon of open source learning platforms and resources that have mushroomed online in the past few years, and their game-changing contribution to K12 education.

**6.5 Open-source learning resources and platforms**: Open resources for primary/secondary education can be found on the web, especially on video streaming services like youtube, and those teachers who are interested and adept in using technology use graphics, videos and animations found on the web to enliven their teaching. Popular among online open source learning resources for K12 education, are the Khan Academy and CK-12 Foundation materials.

Khan Academy is a non-profit with thousands of free online practice exercises, instructional videos, and other educational resources on topics ranging from math to science, history, computer programming, economics and more than 36 languages.

http://www.khanacademy.org/about

An SRI Education study (Robert Murphy *et al.*, March 2014) showed that using Khan Academy resources correlated with an increase in test scores, a decrease in test anxiety, and a higher perception of academic self-confidence (cf Kim and Migdal, 2016, HBS Cases).

CK-12 Foundation is a California-based non-profit with free "standards-aligned open content in the STEM (Science Technology Engineering & Mathematics) subjects" for K-12 students via "digital textbooks, concept-based learning, SAT prep and interactive Algebra curriculum" in multiple delivery modes

www.ck12.org/about/about-us

Research by the California Learning Resource Network ("Learning Resources", 2010) showed that CK-12 textbooks scored higher than publisher-product materials in meeting the California curriculum standards. Robinson *et al.* (2014), in a study conducted in the State of Utah, USA, showed that students using open source textbooks scored higher on end-of-year standardised science exams than those using copyrighted textbooks.

While such demonstrably effective open source materials and resources are available online to resourceful teachers, platforms that make available collections of curated open source materials, besides allowing teachers, students, educationists, administrators and other stakeholders to interact, create and distribute resources, share innovations and engage in training and a range of activities crucial to quality K12 education, have been path-breaking in enabling wide use of open online resources, especially in the developing world. We will consider two such platforms, Rumie Initiative, an international platform launched in 2013 in New York, and EkStep Platform launched in India in 2016. These platforms were the result of

some in education and international development fields determined on using technology-based solutions to increase access to, and efficiency of education.

Rumie Initiative (Kim and Migdal, 2016, HBS Cases), a global non-profit initiative publicly launched at the November 2013 UNICEF conference in New York, distributed computer tablets to NGOs in some of the most impoverished countries around the world that lacked basic educational resources. The tablets were pre-loaded with Rumie proprietary software and a library of open source education materials, thousands of pieces of curated educational content - digital text files, videos and apps- that did not require an Internet connection and were robust enough to withstand rough conditions. Rumie Tablets were a means for schools to bypass printed materials in favour of an easier-to-deliver cheaper delivery option. By October 2015, Rumie had distributed thousands of tablets in twelve countries, and had plans to ship another 1500 (to five more countries) by the end of 2015, and a further 5000 in 2016. Costing less than an average textbook (initial pricing was $50 a tablet), Rumie tablet, according to its founder, was a library for the cost of a book.

Rumie recommended open source content and learning resources that met broad needs for middle and secondary school STEM and literacy subjects according to externally conducted studies, e.g. digital textbooks and other materials from CK-12 and videos from Khan Academy, among others. Rumie found that although content varied from (NGO) partner to partner, many NGOs included culturally neutral and broadly useful content along-with supplementary resources. Schools in Rumie's target regions often had a bare minimum of resources, were staffed by under-trained teachers, and received little guidance from local education authorities. NGO partners also ranged widely in their knowledge of education, technology, and how to operate effectively in such environments. Rumie recommended NGOs work with **OER4 Schools**, a **free University of Cambridge resource** that guided teachers through the process of **integrating technology into the classroom**.

Deployments of Rumie tablets in different settings reflected that NGO partners differed in their respective missions and planned uses for its tablets. STIR (Schools and Teachers Innovating for Results) in India used the tablets as a tool for teacher training, and even to help new teacher-trainers. Sharath Jeevan, founder and CEO of STIR explained how they used the Rumie Tablets: "We have nodal points- education leaders, government officials, and networks of teachers- who run meetings of 20-30 teachers. We don't give the tablets to the teachers, that's

too expensive. Each network of teachers shares innovations in the classroom, collaborating with each other to improve learning levels in their schools. We will work with 1000 teachers over the next five years, using a blended model where teachers both meet face-to-face and also use technology elements to give them time to deepen skills and connections in between physical meetings". STIR even used projectors to display content at meetings so teachers would not each require their own tablets.

By 2015, Rumie sought ways to move beyond delivering content via tablets, and to providing the best, most suitable content for Rumie users. Lacking in house expertise to evaluate specialised content, Rumie decided to build a platform that could leverage the wisdom of the crowd as in the Pinterest model (a website that allows users to curate and share images and other digital media, and browse similar content curated and shared by others). Thus, LearnCloud was developed, on which any user could share educational content on the site, browse existing content, contribute ratings and reviews, or see others' reviews and collections. The site featured thousands of materials and educational resources in a variety of media and formats. Rumie highlighted certain materials on the LearnCloud homepage, or users searched by individual lessons or collections, which others had curated into rudimentary curricula by topic. In October 2015, Rumie opened the LearnCloud to the public. Now anyone could discover, share and rate free digital educational content from any source. A cloud-based platform moved Rumie beyond hardware in anticipation of a world where data connections and cheap mobile devices were common even in developing markets.

The EkStep digital platform ( http://ekstep.in ), launched in Bangalore, India, in July 2016, from inception, leveraged the accessibility of mobile devices to provide pedagogic digital infrastructure for learning fundamental concepts of literacy and numeracy. It was an INR 65 crore venture launched by the EkStep Foundation ( http://ekstep.org ) founded by Infosys co-founder Nandan Nilekani together with his wife Rohini Nilekani. Initially, the platform was set to benefit children in Government schools with little or no access to technology, by linking textbooks to digital content through a mobile app, ***Genie***, so the child could go beyond the textbook on every topic learnt. As of December 2016, 10000 Government schools in Karnataka were using the platform to enhance the learning levels of children: the only requirement for using this facility was for the teacher to have a mobile phone to download the related content. Apart from Karnataka, EkStep was also in use in 17 other Indian states, through various NGO partners. Languages operational included English, Kannada, Hindi, Marathi and Telugu. The ultimate aim of the platform, according to CEO Shankar Maruwada, was "...to create a

technology backbone, which others can use for solutions. Essentially, EkStep is a digital spine which allows others to build solutions. ***It is a free public open infrastructure for education***" (emphasis added).

[Times of India, December 26, 2016]

In a public statement, co-founders Rohini and Nandan Nilekani stated:

"At EkStep, we are investing in creating open digital public goods. Our intent is for it to benefit an ecosystem of innovators who can create contextual solutions for the development sector through its Societal Platforms approach...", taking the platform's ambitions far beyond their original conception.

(Economic Times, November 15, 2017)

The portal ( http://ekstep.in ) is designed as an open learning platform with a collection of learning resources in literacy and numeracy, with contributors who may include teachers, parents, learning facilitators, developers, writers, artists, illustrators and assessment creators, creating and publishing interactive teaching content for learners, and in turn, using the images, audios, stories, worksheets, simulations, games and activities, created and shared by other community members on the platform. Analytics on learning levels, common errors and other (anonymised) information on learners, and content usage data including ratings, can be accessed on the platform, as well as time trends on usage for creators and users.

The platform has a layered and modular design, allowing for the co-creation of scalable solutions by community members, and it has a content repository, publishing tools and analytics, as well as concept maps, teaching methods, and language models.

( http://ekstep.org )

In the context of Rumie's evolution from careful curation and selection of content for pre-loading on Rumie tablets, and tracking and controlling usage by students and teachers, to relying on the wisdom of the crowd for curation and selection of additional content (besides its own recommendations) on its LearnCloud, EkStep early on was inclined to allow the platform to evolve organically according to the needs and preferences of community members, with a non-intrusive supporting infrastructure. In early 2017, EkStep was still wrestling with the

problem of the platform being used to post irrelevant content and propaganda[14], reminiscent of the current connundrums faced by social media platforms of technology corporations such as Facebook, Twitter and Google (Alphabet).

Governments in both the developed and developing world have also taken to making open resources available to students across their domains.

"Content developed by state funded projects and programmes will be deployed under appropriate licensing norms (like the Creative Commons[15]) to facilitate open and free access to [ICT] resources...All public funded National and State level agencies will partner in developing, compiling and making available digital content, resources and tools. Norms for quality, universal open access for different types of digital content will be defined" (National Policy on Information and Communication Technology (ICT) in School Education; Ministry of Human Resource Development (MHRD), Government of India).

In September 2013, the National Repository of Open Educational Resources (NROER) was launched by the Department of School Education and Literacy, Ministry of Human Resource Development (MHRD), Government of India, to bring together all digital and digitisable resources across all stages of school education, which were then to be offered open and free to all. It was to be managed by the Central Institute of Educational Technology (CIET), National Council of Educational Research and Training (NCERT).

NROER hosts resources in multiple forms of media, including videos, audios, documents, images, textbooks and interactive content, and in 29 Indian languages including tribal languages. The repository initially hosted concepts from classes VI-XII and was eventually slated to span all classes I-XII in science, mathematics, social science, language, art education and environmental studies. Its collections are organised into semantic maps of concepts within subjects. This enables access to a library from which teachers can access various media and learning objects and images, besides question banks and activities/presentations related to each concept within each subject. The semantic map itself is a learning resource for teachers,

[14] Based on the conversation one of the co-authors had with the CEO, Shankar Maruwada

[15] Creative Commons is an initiative that helps users across the world to legally share their knowledge and creations, by providing free, easy-to-use copyright licences to create a simple and standardised mechanism to give the public permission to share and use the licensee's creative content on conditions set by the licensee. Creative Commons and its affiliates work with public agencies, non-governmental institutions and universities, so they may employ region-specific approaches to copyright and intellectual property. http://creativecommons.org/about

through which they can critically assess the curriculum. It aids them in the construction of their own unique learning themes for their classrooms.

NROER also allows users to contribute their own resources, but the uploaded resources are subject to review by experts. In addition, NROER allows users/teachers to download, share, comment on and rate media resources. NROER carries a Creative Commons license (CC BY-SA), which allows it to legally reuse, revise, remix and redistribute content. Resources contributed to the repository must similarly be covered by a CC BY-SA license and the documents uploaded must be encoded using non-proprietary open standards.

The objectives of NROER are

- To store, preserve and provide access to a variety of digital resources to students and teachers
- To enable the participation of the community in the development and sharing of digital resources
- To enhance the quality of the education system in the country
- To facilitate teachers to create and share contextual teaching and learning resources
- To celebrate innovations in resource creation

[NCERT 2016; EdTech Review, September 3, 2013]

Open and free online resources clearly have a potential impact on the viability of online education markets. Still, the online market in India for paid products and services, especially in primary and secondary education supplemental services, is expected to grow rapidly over the next five years, to become the largest segment in the Indian online education market. We will discuss in the following section, the driving forces behind this projection, set out in a recent KPMG report.

6.6 Online Education in India - Future Potential in the school sector: A study by KPMG in India and Google- "Online Education in India:2021" (May 2017), predicts that the online education market in India valued at US $247 million in 2016 with 1.6 million users, is set to grow to US $1.96 billion with 9.6 million users by 2021. The report also projects a phenomenal growth of the paid user base from the current 1.57 million users to 9.5 million users, at a cumulative annual growth rate (CAGR) of 44%.

Primary and secondary supplemental education is expected to be the largest segment in the online education market in 2021 (39% up from 30% in 2016), valued at US $773 million (US $73 million: 2016), having grown at a CAGR of 60% in the intervening period. The driving forces are the quantum increase in the student population, with 280 million students expected to be in school by 2021, and the increasing adoption of online products and services by this target population. The report notes that the current demand in this category is driven by consumer behaviour shift towards deeper understanding of topics in the place of merely clearing examinations. Future growth is expected to be driven by the large offline student base and increased internet penetration in Tier 2 and Tier 3 cities.

India has witnessed a significant increase in total internet user population from 2011 to 2016, with an overall internet penetration of 31% and 409 million users in 2016. The number of smartphone users also grew exponentially reaching 290 million in 2016. The total internet user population is expected to grow to approximately 735 million in 2021 and smartphone users are expected to grow to 470 million ("Indian Languages-Defining India's Internet", A KPMG in India-Google Report, April 2017).

As for the market characteristics of the primary and secondary supplemental education segment, tuition culture is prevalent in India, with an estimated 71 million students taking tuition to supplement their school education (National Sample Survey Office (NSSO) Report, July 2015). Adoption of online supplemental courses is limited suggesting potential for future growth. The market has select large players dominating, along with new smaller entrants with innovative business models.

The typical model is a B2C model, but the C2C model also has gained a growing presence through smaller platform providers whose offerings span many categories. In the B2C model, courses are offered as subscription packages for a set of subjects applicable to a particular grade/level and subscription fees are in the range of INR 10000 to INR 20000 per course per annum. 50% of online users indicate preference for video content on these platforms (Nielsen Primary Survey, Online Education Users; N=3608). Students access large-sized content such as video sessions and assignments on laptops, and other content on mobile phones, indicating the need for a multi-device strategy. Access to free content on the platform to provide an experience seems to drive the adoption of the so-called 'freemium' model (free samples initially and charge for the complete course), leading to eventual paid subscriptions. On the other hand, the availability of plenty of free content online diminishes the perceived value of paid content

(as we discussed in the previous section). In 2016, the number of paid users in this market segment was 4, 67,000. Of students at the higher secondary level adopting online education, 85.7% were science students who preferred quality supplemental content that could also help them prepare for competitive examinations, in addition to helping with the school curriculum. C2C platforms operate on a revenue sharing model where the platform receives 15-35% of the fee paid by the student and the balance by the content generator. Platforms enabling students to meet relevant tutors in online/offline mode is gaining increasing acceptance and strong traction, especially in Tier 2 and Tier 3 cities.

Online platform providers play a pivotal role in the online education ecosystem. In recent times, these platform providers have begun dabbling with the production and provision of content themselves, besides curating content on their platforms. Online education in India is a mix of online-only players and offline players with an online presence.

The report predicts future trends in this market segment to include (1) increasing gamification in the form of simulation of concepts, incentive-based learning and level-advance badges, driving user engagement;

(2) Adoption of 'blended' model with online-offline modules;

(3) peer-to-peer learning gaining pace;

(4) Big data and AI assisting in the delivery of customised content; and

(5) Adaption of technological trends such as the use of wearables and virtual/augmented reality, and cloud-based solutions to enhance user learning experience.

While these online products and services could bring about much-needed changes in pedagogical approaches, away from rote learning to deep conceptual learning, their impact is likely to be confined to select geographies and economic classes. However, the growing internet and mobile populations will certainly pave the way for access to open resources with the growth of governmental and non-governmental societal platforms providing access to free content and venues for knowledge transfer and exchange.

## 7. Conclusion

"Education contributes to economic growth, improved health, women's empowerment, gender equality and strengthened social cohesion, as well as to mitigating inequity and the reduction of poverty" (UNESCO 2013). The right to education is therefore considered an empowerment right or multiplier because it enables a person to benefit from other rights (Coomans 2002).

The 'PANEL' model that represents the key elements of Participation, Accountability, Non-discrimination, Empowerment and Link to the (International human rights) law, underlies the Rights-Based Approach (RBA) to education (The Office of the UN High Commissioner for Human Rights (OHCHR); 2002, 2004). Whether education is provided by the State or by non-state providers, it is the State that is responsible for ensuring that these five key elements are duly fulfilled as per international human rights treaties.

“Education shall enable all persons to ***participate*** effectively in a free society" (The International Covenant on Economic Social and Cultural Rights (ICESCR), 1966; Art.13.1). The state must ensure that education, by whomever provided, must impart accurate and appropriate information on human rights conventions, principles and provisions (Convention on the Rights of the Child (CRC), 1989; Art.42). The State is also ***accountable*** for the delivery of its obligation to respect, protect and fulfil the right to free education and for adhering to minimum educational standards of quality learning (Committee on Economic Social and Cultural Rights General Comment 13 (CESCR GC 13), 1999; Sub-section 46). All education must be accessible and of good quality to all children, regardless of their background (CRC: Art.2). There must be established mechanisms within (and outside) the Government to monitor all policies, institutions, programmes, practices and spending patterns with respect to education, to redress any *de facto* discrimination (CESCR GC 13, Sub-section 37), to ensure that schooling 'does not lead to extreme disparities of educational opportunity for some groups in society' (CESCR GC 13, Sub-section 30). While the State must respect private initiatives and the parental right to choose a provider other than itself, at the same time, it is also obliged to ensure that private providers adhere to human-rights principles and are regulated to meet minimum education standards (CESCR, GC 13, Sub-section 29). The State's failure to ensure that private providers adhere to core principles set out in the conventions mentioned, is considered a violation of the right to education (CESCR, GC 13, Sub - section 59).

The Rights-Based Approach to education, in practical terms, requires that education be compulsory and freely ***available***, be ***accessible*** without discrimination, be ***acceptable*** in terms

of quality of teachers, curriculum and facilities, and ***adaptable*** to all contexts to include groups' diversity. This is commonly referred to as the 4As' framework (Ron-Balsera and Marphatia, 2012).

We now consider the responsibilities of the State to ensure the fulfillment of its citizens' right to education, in the light of the growing complexity in the education ecosystem which has been the subject matter of this paper. Not only has a wide range of non-state actors emerged in the education sector worldwide, they bring with them varying motivations and interests and philosophies of education, which often conflict not only with national goals and frameworks, but also make difficult the implementation of global agreements and conventions. On the one hand, partnerships with non-state actors with the stated objectives of improving access to and quality of education, allow national/provincial governments and international development organisations to shirk their roles as primary providers and financiers of education, and to abdicate from their responsibility to ensure the fulfillment of the right to education of the world population. On the other hand, with global influences and powerful non-state players reshaping the educational ecosystem into evermore complex configurations, the State, with its accountability to its population indivisible and non-transferable, and the responsibility for implementation of international human rights conventions exclusive to itself, struggles with woefully inadequate capacity to regulate/monitor the new and varied menagerie in the education sector.

The hopes of the international community, at the turn of the millennium, that businesses and other private entities would step into the breach and fill the yawning funding gaps in the quest for EFA in the developing world, have been largely belied. Moreover, an influx of influence from these largely economic actors, has resulted in a narrowing of the focus of education to employment and economic matters. This has further intensified with increasing automation and the ascendance of digital technologies, as skills become outdated even as they are acquired, and jobs are automated at an alarming pace. Survival in this globalised digital age occupies the attention and energies of individuals and nations to such an extent, that education is likely to continue its focus on economics, and economic actors will continue to play an outsized role. On the other hand, literacy rather than skills, knowledge rather than information, creativity rather than efficiency, and collaboration amidst competition, pave the path to survival and success in this environment, necessitating the broadening and deepening of educational approaches in much of the developed world in recent times.

The potential danger for a country like India emanates from the borrowing of outdated approaches from the developed world, approaches that much research has already proven to be ineffective and occasionally detrimental to the national aims of inclusive quality education. It is important to take into consideration, the motivations and interests of those advocating approaches that have been discredited elsewhere or are unsuitable to the current context. But of paramount importance is the clear enunciation of a national/regional policy on education through the engagement of all the principal stakeholders, and the development of State capacity to effectively monitor myriad operators and assess their impact with reference to these well-defined policy objectives. Outsourcing policy constitutes the largest peril to success in the achievement of national education and development goals. And privatisation needs to be reconceptualised to better understand the extent of influence wielded by non-state actors in shaping education ecosystems, which then constrain and confine all future policy decisions.

Citizen groups and civil society need to play a role in developing institutions and mechanisms to hold the State accountable for fulfilling its obligation to its citizens and for adherence to international human rights laws. And given the current state of human development in India, the Government will need to play a significant role as education provider and financier for some time to come, especially at the pre-tertiary level, to ensure equal access and quality to a very large, diverse and growing number of first generation learners. The current overall expenditure on education in the country at under 3% of GDP is roughly half the international norm, and woefully inadequate relative to its own status and goals. In addition to a continued primary role for the State in education provision, regulatory capacity within the state apparatus also needs to grow apace, taking into consideration the growing diversity in education provision and providers, including online platforms. With rapid growth in internet and mobile access over the forthcoming decade, innovative approaches to reaching difficult-to-reach populations and improving the educational experience must be welcomed, but without diminishing state accountability to ensure fair play and equitable access. Transparent mechanisms, not only to exact accountability from the State but also to facilitate engagement and participation of all stakeholders in the education ecosystem, including teachers, students and parents, education experts, local communities and governing bodies, and civil society, besides business, have the potential to increase informed debate and reduce the policy influence of powerful actors with vested interests or ideologies to promote.

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