BRIEFING: CIES 2016

Expanding Secondary Education for Development

Setting the Scene

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CIES Conference on "Six Decades of Comparative and International Education: Taking Stock and Looking Forward."

0800 Monday 7th March

Sheraton Vancouver Wall Centre, 1088 Burrard Street

Grand Ballroom A

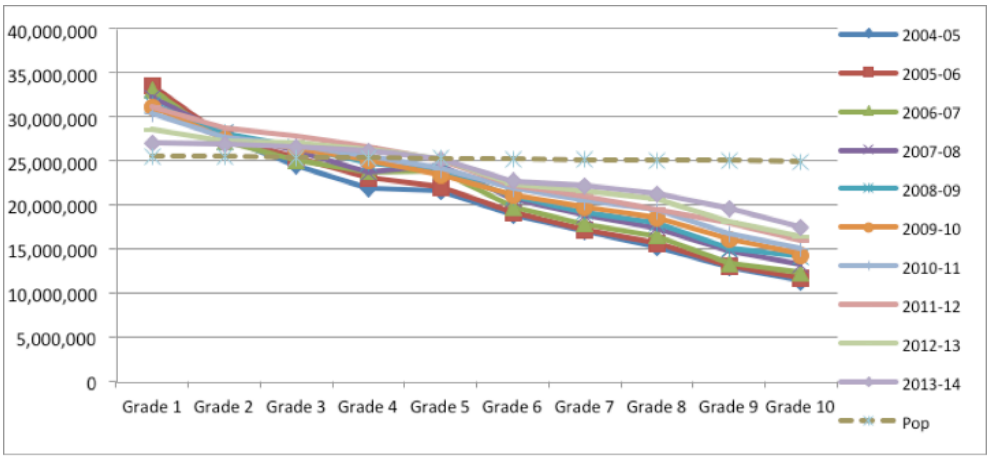
The Sustainable Development Goals extend the agenda of Education for All and go beyond the Millennium Development Goals and commit countries to provide universal access to education up to grade 12 by 2030. This reflects aspirations to finish the journey to deliver rights to education for all started at the World Conference on Education for All in Jomtien in 1990, address growing inequalities at educational levels above primary, and meet new educational needs and close the cognitive gap in learning that now differentiates more and less developed education systems.

There are at least ten issues that will shape progress towards universalising access to school across the developing world. These are discussed below with illustrative data from India.

> First, it will be difficult to achieve universal completion of secondary school in many low enrolment countries as a result of uneven flows of students though the education system. The reasons differ but include insufficient numbers of students reaching and graduating from primary school; inadequate levels of achievement of those entering secondary school who may then fail to complete successfully; insufficient access to secondary school places in remote, mountainous, arid and insecure areas; poor attendance of students and absenteeism by teachers; wide variations between schools in staffing, class size and availability of learning materials; diversion of resources from free public provision to subsidies for private schools which do not enrol children from poor households; and failure to ensure adequate financing to support universal access. Rates of growth needed may exceed plausible rates at which new capacity can be procured and sustained and teachers to

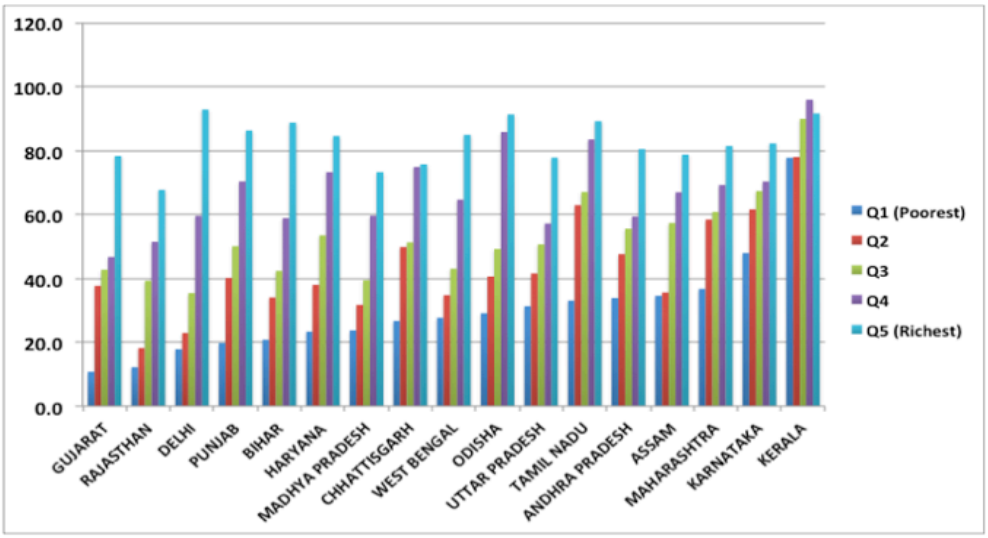
be employed so that pupil teacher ratios of 30:1 and class sizes of 40 are not exceeded.

Figure 1: In some States there are not enough children reaching grade 8 to universalise secondary education



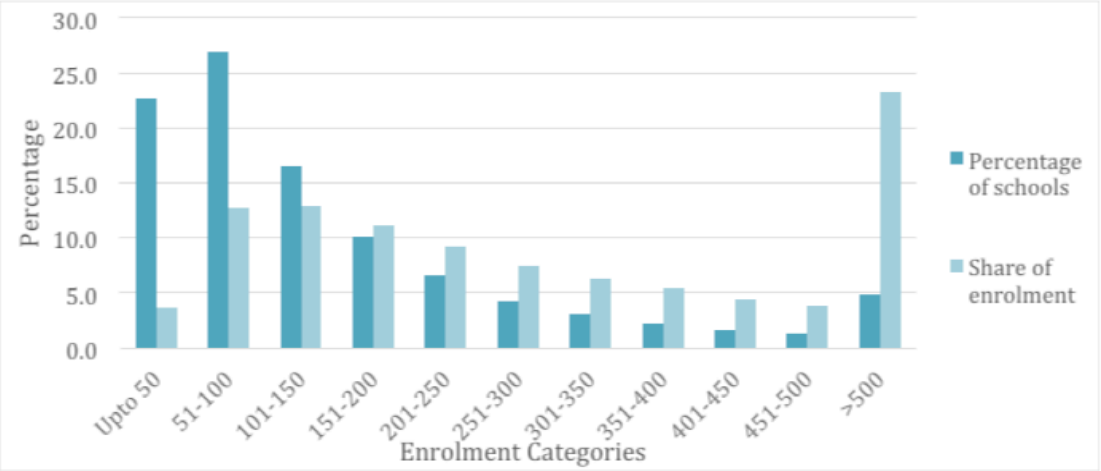
Second, additional demand for secondary education will come mostly from households with more limited cultural capital and from marginalised groups not previously able to enrol in school. These groups disproportionately include children from rural areas and from urban and peri-urban informal settlements and slums, children from low income households, and, in some cases more girls and in other cases more boys. As enrolments expand greater numbers of children will be taking summative examinations originally intended for a select group of children who have attained a high level of academic attainment. New qualifications and courses suited to those who will leave school and seek employment after secondary school will be needed to reduce the chances of a decline in pass rates and standards of achievement, and ensure higher relevance of secondary schooling for those who do not intend to pursue further academic study. New students will need curricula adjusted to their capabilities, pedagogies adapted to less capable learners, and curricula option choices relevant to their likely life futures.

Figure 2 The participation of the poorest in secondary school can be less than one eighth that of the richest.



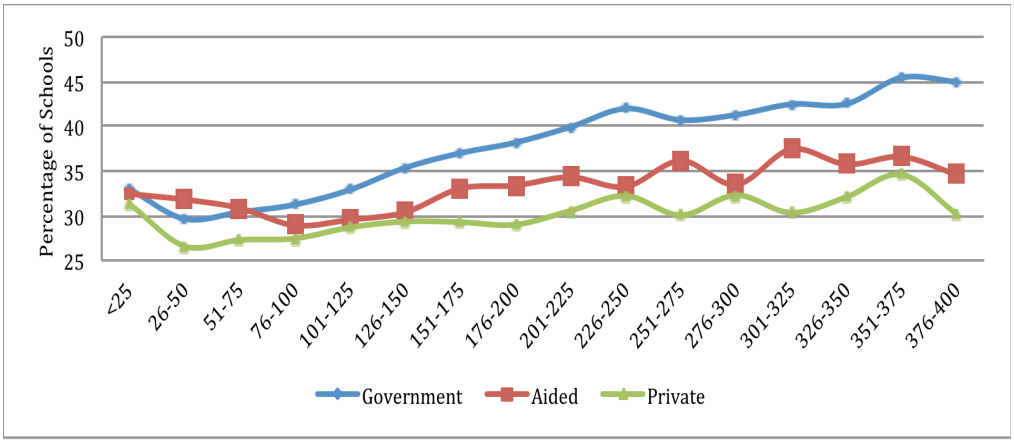
Third, secondary education expansion is leading to a surfeit of small schools with low pupil teacher ratios (PTRs) and high recurrent costs. Thus in some parts of India more than 50% of secondary schools have enrolments below 100 in grades 9 and 10. Large numbers of small schools inflate costs since small schools can be at least four times as costly per student. In some situations small schools are unavoidable. New models are needed for staffing and pedagogy which are affordable and which do not compromise quality. Rationalisation of resourcing through the merging of small schools and creating composite schools can release resources which can then be utilised for financing schemes needed to improve education system efficiency and quality. In contrast to areas where small schools are common, 'mega schools' have developed with PTRs over 150 and enrolments in grade 9 and 10 of over 1000 in some countries. Mega schools are likely to be unwieldy institutions which may suffer diseconomies of scale and difficulties in ensuring that no children are left behind. Mega schools need to be judged on whether they are justified by lower costs and higher levels of achievement. Geographic information systems (GIS) can provide detailed insight into current patterns of school location in relation to habitations. This can lead to the development of plans to increase locational efficiency that are both technically effective and educationally and politically feasible. The goal should be to have fewer schools of much greater quality.

Figure 3 Over 50% of all secondary schools have less than 100 students



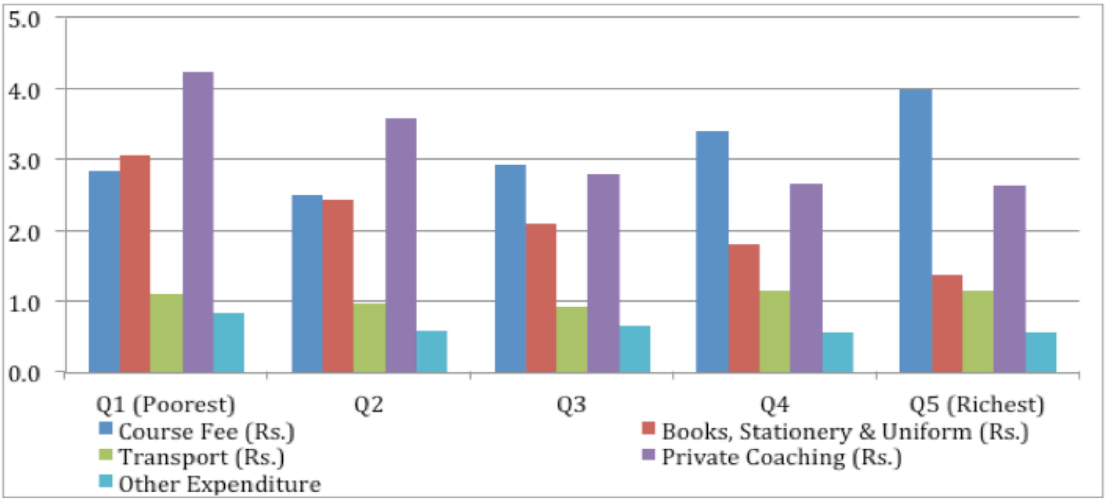
Fourth, the distribution of teachers is very uneven in secondary schools in low enrolment countries. Thus PTRs within the same district can vary from below 10 to above 100. The problem is further exacerbated by staff recruitment policies. For example in some states in India less than 14% of schools have teachers qualified in all four of the main subject areas despite very low PTRs and high teacher per class ratios. Expanded secondary schooling requires many additional teachers covering all major subjects and electives, especially where current PTRs are over 30. New teachers are needed to meet additional demand and reduce the backlog. Where PTRs are low it may be possible to increase them by making use of multi-subject and multi-grade teachers within a planned system of reforms to improve the effectiveness and reduce the costs of small schools.

Figure 4: Less than 40% of schools have qualified teachers in four core subjects



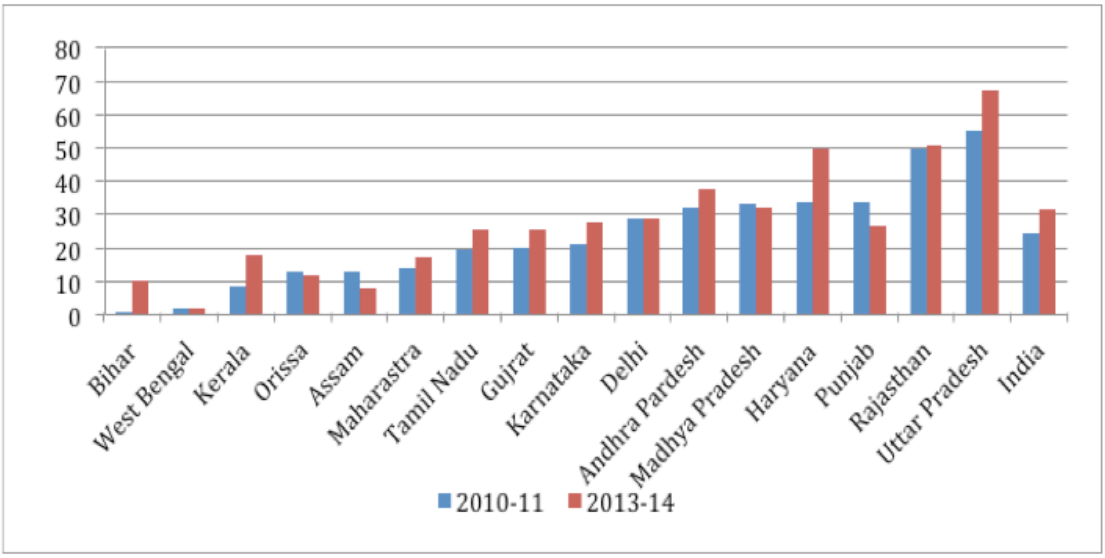
Fifth, secondary education expansion will be constrained by the additional financial burden that this will place on poor households which will provide the bulk of new students. Much of the new demand will come from children from lower quintiles of household income and from groups likely to be poorer rather than richer. Cost is a major factor in decision making on attendance at secondary school for poor households and costs to household may be more than four times those for attendance at local primary schools depending on location and school type. For this reason attendance must be fee-free and direct costs to households must be minimised for households with the lowest range of income. Those at or below the poverty line are likely to need cash transfers to support the direct and opportunity costs of secondary school attendance and should not contract debt at high interest rates to pay school costs. No child should be excluded from secondary school by the costs of attendance. This means that secondary school should be fee free and supported by scholarships or cash transfers for all for all those in the lowest two quintiles of household expenditure.

Figure 5: The poorest spend at least 12% of household expenditure per student in secondary school



Sixth, private schools now enrol as many as 30% of those in secondary schools or about 15% of all secondary age children in large countries e.g. India. Most of those participating in private schools are from the richest households. Most private schools are in areas of high population density and relative wealth. Low price private schools are difficult to finance and operate at secondary level. This will place a constraint on the extent to which private for profit providers can contribute to expanded access to secondary schooling since most households below the second quintile will find private schools unaffordable. Private schools generally do not increase access but attract students who would otherwise be in public schools. They are often are socially exclusive as several high profile court cases in India have shown. They may also be socially inefficient if they result in distortions in the labour market for secondary school graduates. There is yet to be any systematic evidence that private schools raise standards in public institutions as a result of competition. In most cases there is little competition as households are stratified by wealth and choice is constrained by price. Private and public schools may interact destructively if they take student and staff from existing public schools. Private tuition has grown alongside private schools to the extent that it can cost households as much as all the other costs of secondary school attendance. It is not clear what are the net effects of the investment. It may encourage or facilitate student's absenteeism and teacher under employment. It may favour the rich who can afford to buy more of it and it is therefore socially regressive. It may simply be raising the price of selection by high stakes examinations without much impact on who gets selected. The probability is that private tuition and its cost will continue to grow and affect more and more households. The poorest will contract debt to pay the costs thus making themselves even poorer.

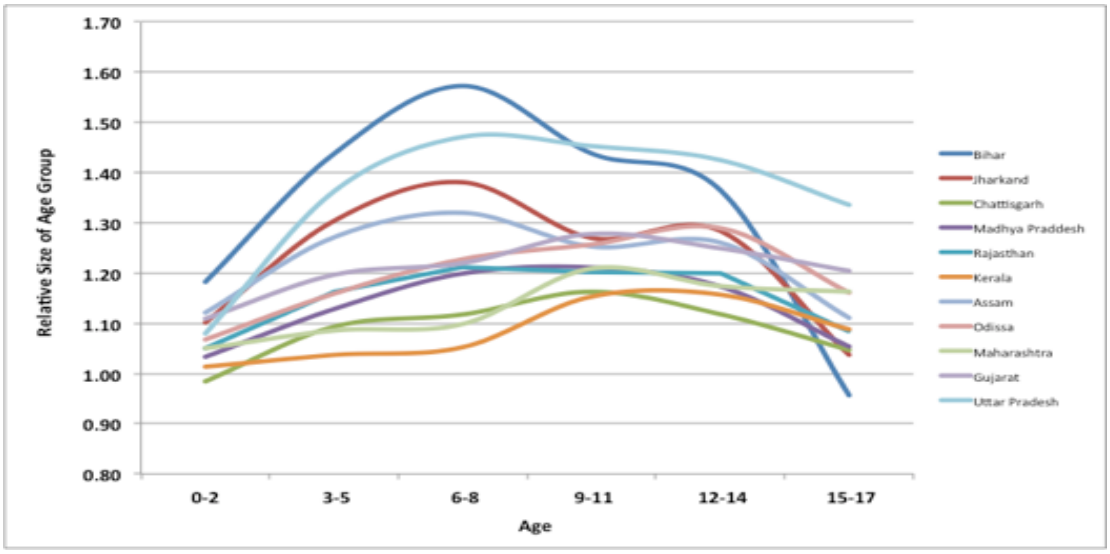
Figure 6 Private schools attract about 30% of students most of whom are rich



Seventh, demographic transition is a reality across much of the developing world and will lead to declining numbers of secondary school-aged children. Globally demand for secondary school places is likely to peak by 2020 after which the numbers of secondary age children will fall by 20% or more over a decade. This has already happened in China and many parts of East Asia. It will happen across India over the next decade. The pattern of demand for school places will be determined by demography, and the current stock of

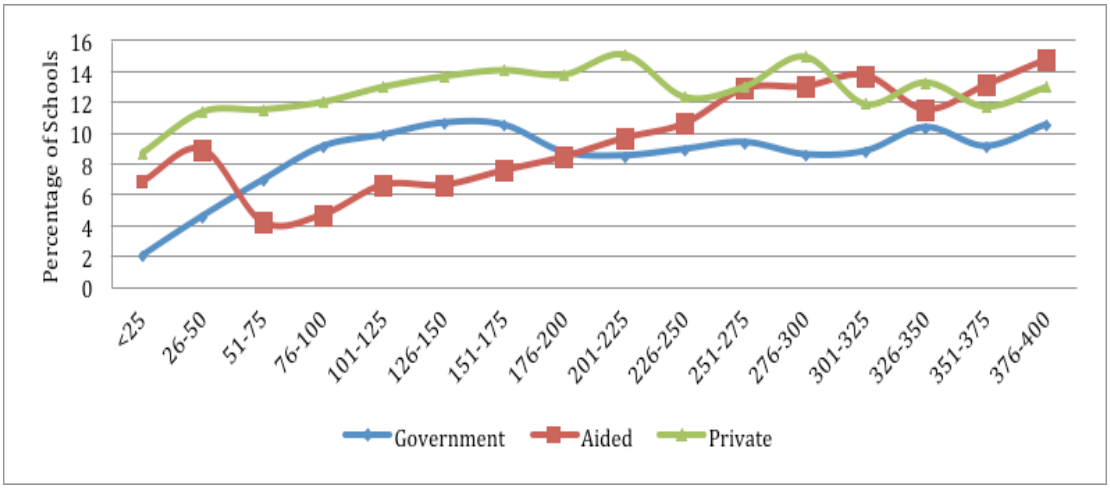
schools and classrooms. The temptation to build and provide staff and facilities to meet peak demand should be managed to avoid creating excess capacity that will become redundant as numbers fall. Options to meet peak demand and "tunnel through" the peak need to be considered. These might include more flexible teacher deployment and temporary double shifting. It will also be important to monitor utilisation rates of school infrastructure so that nominal enrolments are matched by actual attendance rates.

Figure 7: The number of secondary school age children will fall by more than 20% over the next decade in many States



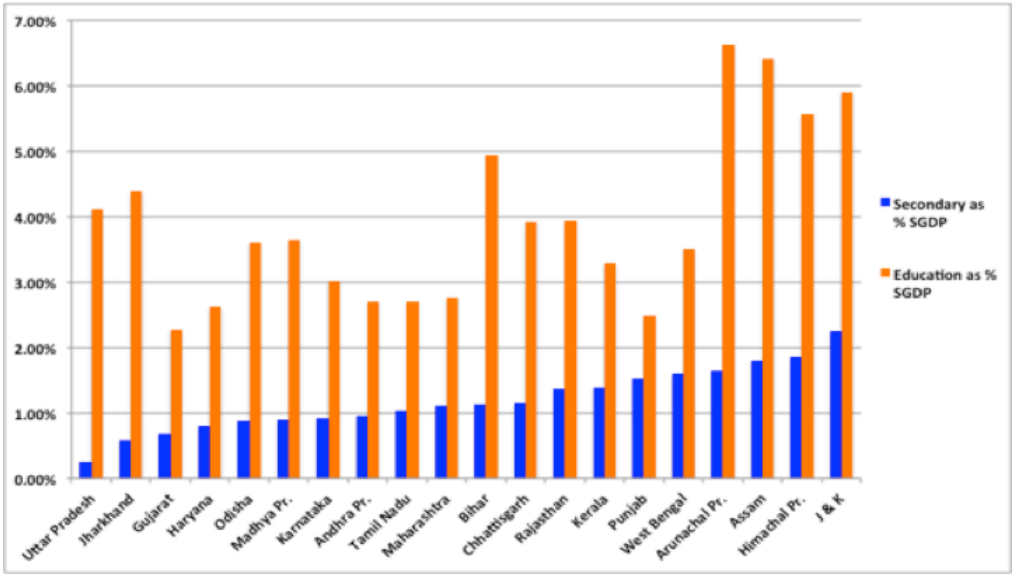
Eighth, new technologies are on the cusp of having an extensive impact on how secondary school is provided. As more and more pats of the developing world begin to have access to the internet at low enough costs to afford then many possibilities open up. Massive online courses are feasible for older students who are motivated and literate. Schools no longer need conventional libraries and school textbooks can be made variable on a stick of virtually no marginal cost. The best teachers can share their methods free on line and private tutors can be projected through U-Tube and similar channels. More and more learning may take place in peer to peer networks. Qualifications can be globalised through web based selection and certification across borders. The possibilities are extensive, the demonstration of the potential at an early stage, and the opportunities very significant. The impact of ICT on education has a history of false prophets and hardware and supply driven solutions to problems in low income countries that have yet to demonstrate their educational value in rich countries. This may be about to change and, to the extent that new modalities to deliver learning at secondary school level are cost effective, quality assured, compliant with health and safety and privacy legislation, and subject to national oversight the opportunity exists to catalyse a step change in access to education above primary school level.

Figure 8 Fewer than 15% of schools have a computer lab, science lab, and library space



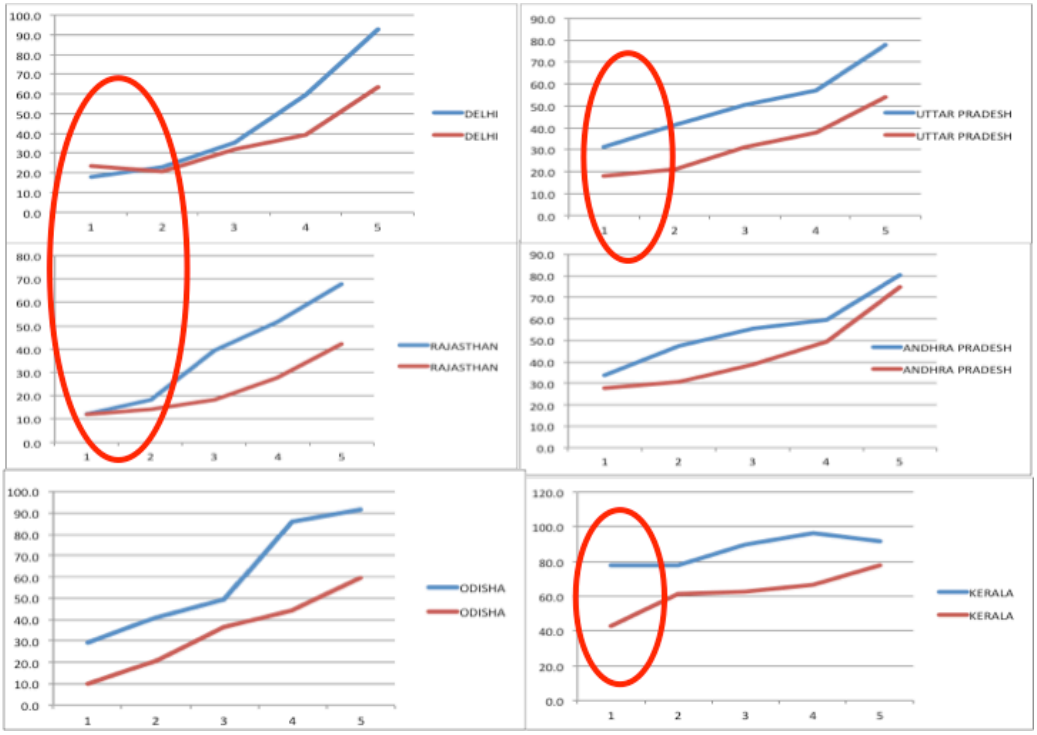
Ninth, financing universal secondary education with current cost structures in some countries could require more than 2% of GDP. This level is financially unsustainable without a disproportionate allocation of the State budget to the education sector. Planning should allocate about 1%- 1.5% of GDP to secondary schooling depending on the length of the cycle and the characteristics of demographic transition. In states with high current per-student expenditure the additional costs of universal participation require cost saving reforms which increase efficiency and effectiveness. In States with low per pupil expenditure there is likely to be a need to increase expenditure per student linked to reforms designed to improve quality and achievement towards national averages. This would make provision between States more equitable. It would require States to increase the allocation of resources to secondary education from levels that are low relative to national averages.

Figure 9: States allocate different amounts of GDP to secondary education



Finally, growth in participation is likely to be inequitable. The relatively advantaged within excluded groups will benefit more than the most excluded as expanded access becomes a reality. Thus children from richer households may increase their chances of completing secondary school at the expense of those in the same groups from lower income levels. It is important to monitor who benefits from expanded access and develop strategies to ensure that the most marginalised are also reached. If academic achievement alone is used to filter and select children into different secondary schools this may replicate and reproduce inequality in ways that are not transparent. Local solutions are needed to ensure equality of opportunity in secondary education is a reality and that changing patterns of provision and access are publicly monitored to limit the effects of elite capture of public subsidies

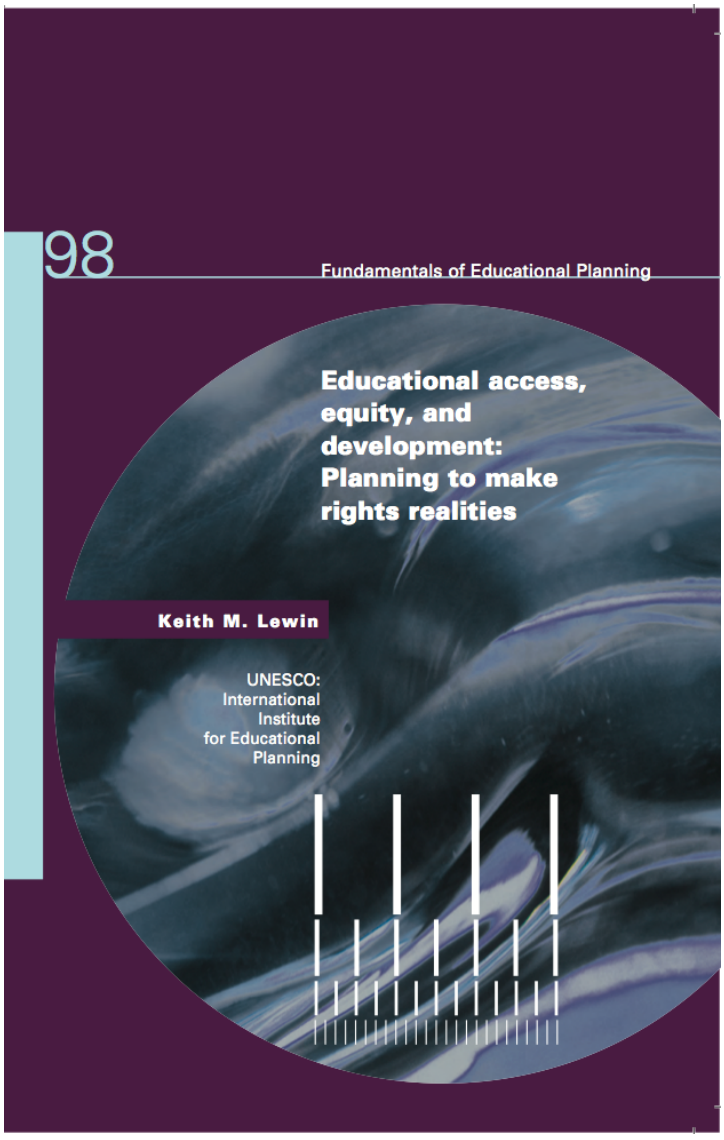
Figure 10: Between 2007 and 2014 participation in secondary school grew much faster amongst the richest rather than the poorest except in Kerala.



It is essential that planning of expanded secondary schooling infrastructure, staffing and financing should pay full attention to the issues that link access, equity, efficiency and effectiveness to the flow of children through the school system. Planning must reconcile high aspirations with realistic goals and allocate resources in ways which reflect demography, constraints on growth arising from the flow of children through to grade 8, efficient teacher deployment, curricula and pedagogies relevant to new learners, and needs to tailor expansion of opportunity to promote pro-poor and more equitable access to quality secondary schooling. Navigating the ocean of possibilities requires not one road map but a series of medium term perspective plans sensitive to local opportunities and priorities that roll over from year to year and have the benefit of projection modelling and Geographic Information Systems. The essential gestalt is to see the planning issues as managing the flow of students over time, and managing learning, rather than meeting transient patterns of demand at a fixed point in time. Conventional planning sets aspirational targets independently of the prospects of achieving them within a

defined timescale with the resources available. Not surprisingly such plans often fail because the aspirations are unrealistic, the goals may not be shared, and the necessary resources are assumed rather than provided. In contrast target generating planning[1] anticipates what will happen without intervention and seeks incremental gains in relation to valued outcomes through continuous and consistent improvement rather than repeated and disruptive innovation. Most countries which have succeeded in universalising secondary school and which score highly on international comparisons of achievement have followed this path.

New Book



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[1] Lewin 2015, http://unesdoc.unesco.org/images/0023/002350/235003e.pdf)