Create Consortium for Research on Educational Access, Transitions & Equity

Making Rights Realities

Researching Educational Access, Transitions and Equity

University of Sussex
Centre for International Education
Department of Education

DFID Department for International Development

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Consortium for Research on
Educational Access, Transitions & Equity

Funded by DFID

The Consortium for Educational Access, Transitions and Equity (CREATE) is a Research Programme Consortium supported by the UK Department for International Development (DFID). Its purpose is to undertake research designed to improve access to basic education in developing countries. It seeks to achieve this through generating new knowledge and encouraging its application through effective communication and dissemination to international development agencies, national governments, education and development professionals, non-government organisations and other interested stakeholders.

Access to basic education lies at the heart of development. Lack of educational access, and securely acquired knowledge and skill, are part of the definition of poverty, and a means for its diminution. Sustained access to meaningful learning that has value is critical to long term improvements in productivity, the reduction of inter-generational cycles of poverty, demographic transition, preventive health care, the empowerment of women, and reductions in inequality.

The CREATE partners

CREATE works collaboratively with partners in Sub-Saharan Africa and South Asia. The lead partner of CREATE is the Centre for International Education at the University of Sussex. The partner organisations and convenors are:

- The Centre for International Education, University of Sussex: Professor Keith M Lewin (Director)
- The Institute of Education and Development, BRAC University, Dhaka, Bangladesh: Dr Manzoor Ahmed
- The National University of Educational Planning and Administration, Delhi, India: Professor R Govinda
- The Education Policy Unit, University of the Witwatersrand, South Africa: Dr Shireen Motala
- The Universities of Winneba and Cape Coast, Ghana: Professors Jerome Djangmah and Joseph Ghartey Ampiah
- The Institute of Education, University of London: Professor Angela W Little

Disclaimer

This research was commissioned by the Consortium for Research on Educational Access, Transitions and Equity (CREATE http://www.create-rpc.org). CREATE is funded by the UK Department for International Development (DFID) for the benefit of developing countries and is coordinated from the Centre for International Education, University of Sussex. The views expressed are those of the author(s) and not necessarily those of DFID, the University of Sussex, or the CREATE Team.

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Preface

This report synthesises the results of research on access to education in Africa and Asia over the last six years by a multinational consortium of leading international institutions based in Bangladesh, Ghana, India, South Africa and the United Kingdom. The research programme was coordinated from the Centre for International Education in the Department of Education at Sussex. The UK Department for International Development supported the programme generously within its commitments to achieve the Millennium Development Goals.

A multidisciplinary team of over 100 researchers has produced more than 150 publications including several books, four special editions of journals, seventy research monographs, and twenty-five policy briefs. These provide new insights into why so many millions of children in Africa and South Asia fail to complete a full basic education, with consequences both for them and for the societies in which they live. The knowledge, skills and values these children acquire will determine the pathways development will take in the future. Their capabilities and actions will shape progress on reducing infant and child mortality, preventing diseases associated with poverty and ignorance, improving nutrition and food security, and enhancing the productive enterprise that can reduce poverty and contribute to greater equity.

This research demonstrates how much progress has been made, and how far there is to travel if human rights to basic education are to be delivered to all children. It provides many insights into the political economy of educational reform. The analysis of changing patterns of inclusion and exclusion contains many lessons for policy and practice in pursuit of the internationally agreed goals of Education for All.

It is a great satisfaction to see research coordinated from the University of Sussex address the critical issues that surround reducing the knowledge and skill gaps between rich and poor countries. This reflects the long standing commitment to international development of the University, and reinforces the reputation of Sussex and the Centre for International Education for cutting edge research and leadership on issues of global significance.

Michael Farthing
Vice Chancellor

University of Sussex
Centre for International Education
Department of Education

DFID Department for International Development

Acknowledgements

The Consortium for Research on Educational Access, Transitions and Equity (CREATE) is a collaboration between seven institutions coordinated from the Centre for International Education, University of Sussex. The other partners are the Institute of Education and Development, BRAC University, Dhaka, Bangladesh; the National University of Educational Planning and Administration, Delhi, India; the Education Policy Unit, University of the Witwatersrand, South Africa; the Universities of Winneba and Cape Coast, Ghana; and the Institute of Education, University of London, U.K.. CREATE associates undertake small scale work in other countries including Kenya, Malawi, Sri Lanka, Nepal, Pakistan, Ethiopia, Mali, Tanzania and China.

Since 2005 over 140 researchers have worked on CREATE projects on educational access within a framework developed by the partners. Large scale empirical enquiries using household surveys and school level data collection have been complemented by case studies, tracking of children in school and out of school, and a range of thematic and policy studies related to improving access to education. More than 150 research publications and other outputs are now available on line.

The partners gave generously of their time and wisdom and are to be thanked for their many contributions to the development of the programme, their sustained efforts to develop the various research activities and their support for capacity building. Partner Research teams were led by Dr Manzoor Ahmed; Professor R Govinda; Dr Shireen Motala; Professor Jerome Djangmah; Professor Joseph Ghartey-Ampiah; and Professor Angela W Little. In addition the CREATE international advisory group gave constructive advice and support throughout the programme and its members are also due a debt of gratitude for their very welcome wisdom. They are Paud Murphy (Chair), Professor Pai Obanya, Professor Swarna Jayaweera, Dr Michael Ward, Dr Colin Bangay, Dr Chris Berry, Dr Sally Gear, and Steve Packer. Dr Fran Hunt, Dr Nicole Blum and Dr Benji Zeitlyn made extensive and valuable contributions to the programme as CREATE research fellows. Elena Dennison and Justine Rachel Charles provided excellent project coordination throughout.

The research could not have been undertaken without the generous assistance of a large number of colleagues in Ministries of Education, schools and communities, and research institutions who have given freely of their time and copiously of their opinions and reasoning. The debt of gratitude is considerable; the reward is to be found in the various research outputs and the translation of the insights and ideas of CREATE into practice.

Professor Keith M Lewin
Director of the Consortium for Research on Educational Access, Transitions and Equity

BRAC UNIVERSITY

UNIVERSITY OF EDUCATION WINNEBA, GHANA
Education for Excellence

Education Policy Unit

IOE LONDON
Leading education and social research
Institute of Education
University of London

University of Cape Coast

Making Rights Realities

Research Insights into Educational Access, Transitions and Equity

What is CREATE?

The Consortium for Research on Educational Access, Transitions and Equity (CREATE) is a programme of research to analyse policy and practice designed to reduce educational exclusion and expand access to basic education for school age children. The research is supported by the UK Department for International Development (DFID). The Consortium is coordinated from the Centre for International Education at the University of Sussex.

The aim of the research is to increase knowledge and understanding of the reasons why so many children fail to complete basic education successfully in low income countries. CREATE generates insights from large scale empirical work at community and school level, and analysis of cross national data sets. This is complemented by smaller scale case studies and qualitative enquiries using a wide range of social science methods. Its research is designed to be directly relevant to policy dialogue directed towards accelerating progress towards universalising access to basic education in line with the Millennium Development Goals (MDGs) and the Dakar commitments to Education for All.

CREATE thus adopts an expanded vision of educational access that includes concerns for attendance as well as enrolment, progression at the appropriate age, achievement of learning goals, equitable access to opportunities to learn, and availability of an adequate learning environment.

CREATE complements the work of many other groups and agencies committed to Education for All. Its findings support the work of DFID and other bi-lateral development partners. It feeds its insights into the multi-lateral architecture committed to achieving the MDGs, and into national policy making.

Partners

The main CREATE Partners are:

- **The Centre for International Education, University of Sussex,** Brighton, U.K.: Professor Keith M Lewin
- **The Institute of Education and Development, BRAC University,** Dhaka, Bangladesh: Dr Manzoor Ahmed
- **The National University of Educational Planning and Administration,** Delhi, India: Professor R Govinda
- **The Education Policy Unit, University of the Witwatersrand,** South Africa: Dr Shireen Motala
- **The Universities of Winneba and Cape Coast,** Ghana: Professors Jerome Djangmah and Joseph Ghartey Ampiah
- **The Institute of Education, University of London,** London, U.K.: Professor Angela W Little

Other countries on which small scale work has been commissioned include Kenya, Malawi, Sri Lanka, Nepal, Pakistan, Ethiopia, Mali, Tanzania and China.

This volume draws together insights from a wide range of CREATE research products which are cited in the text. More than 150 publications are now available on-line from the website.

Director's Statement

CREATE was conceived in 2005 as a consortium that would develop a tapestry of insights into access to education across the developing world. All the partners have been engaged with the long history of Education for All and have special responsibilities to analyse, advise, and contribute to well conceived, evidenced based policy and practice.

The Consortium has depended on the goodwill and commitment of over 140 researchers. They have been supported by many others who have taken part in CREATE events, coordinated a wide range of activities, and shared in the excitements of empirical research. This volume captures the published outputs of CREATE and sets them in a narrative of research findings and insights.

More than 20 CREATE associates will receive doctorates, and many more have benefitted from capacity building workshops. CREATE publications are being extensively used in postgraduate programmes and training courses. The intellectual architectures of the programme continue to develop.

CREATE has been a journey without a single destination. It has many spin offs and resonances in national and international policy dialogue. The partners and associates will continue to build on the impressive array of research linked to policy that they have created.

Professor Keith M Lewin
Director of CREATE

Members of the CREATE team at the joint RPC Conference in London, November 2010

Overview

Over 60 million children of primary school age are not in school. Most are in Sub Saharan Africa and South Asia. Access to basic education lies at the heart of development. Lack of educational access, and securely acquired knowledge and skill, is both a part of the definition of poverty, and a means for its diminution. Sustained access to meaningful learning that has utility is critical to long term improvements in productivity, the reduction of inter-generational cycles of poverty, demographic transition, preventive health care, the empowerment of women, and reductions in inequality.

Waiting for access to education in Bangladesh

Encouragingly, enrolment rates in primary schools have improved and the estimated numbers of children out of school in Sub-Saharan Africa (SSA) have fallen from about 42-million in 1999 to about 29-million in 2009, and from 37 million to 18 million in South Asia. Gross enrolment rates across SSA now average 102%, and 106% in South Asia, suggesting that more children are enrolled than there are in the six- to 11-year-old age group but that many are overage. Net enrolment rates, which exclude the overage, are less, averaging 76% in SSA and 86% in South Asia. Fewer than 70% of children complete the last grade of primary school in low enrolment countries.

Girls are participating much more than in the past. On average across both SSA and South Asia, for every 100 boys enrolled in the age range there are now 95 girls. But some countries are making slow progress and there are places where boys in school outnumber girls by 20%. Having more boys than girls in school is strongly associated with low overall enrolment rates, high rates of repetition and many overage children in school. However, many middle and higher enrolment countries have more girls than boys enrolled.

At secondary school level the magnitude of exclusion is much greater. In many of the poorest countries more than half of all children fail to enrol at secondary level. Of those who do, fewer than half will complete a full cycle of secondary schooling and qualify for any further education and training. Those who succeed will be overwhelmingly from richer rather than poorer households. The chances of the poorest 20% completing secondary school can be as little as a tenth that of the richest. And if there are gender gaps in participation in primary schooling, they are almost always larger at secondary level.

The gap between the low enrolment countries and those that are rapidly developing is wide. In China almost all children are enrolled in secondary school as they are in most of south India, but not in the less developed northern states. Africa is dramatically under educated at secondary level when compared to all other regions. Economic growth, which underpins the ability to make a reality of universal access to education, depends on the knowledge and skill that post primary schooling can nurture. Foreign direct investment more often than not flows towards more rather than less educated populations.

In reality there are far more than 60 million primary age children whose right to basic education is denied. Many fail to attend regularly, and are seriously over age for the grades they attend. Alarming numbers do not achieve basic skills after 6 years or more of schooling. If these “silently excluded” children are counted then the numbers without meaningful access to primary schooling are well over 250 million. And, if the basic education cycle includes lower secondary, then this number is itself a substantial underestimate of the children whose right to education is compromised.

In 1990 national leaders and international development agencies met in Jomtien in Thailand and committed themselves to universalising access to primary schooling by 2000. In 2000 in Dakar, Senegal, they met again, reviewed progress that had fallen short of expectations, and moved the target to 2015.

The Millennium Development Goal to universalise access to education is now only four years away. For that target to be met, all school-age children would now have to be securely enrolled in school and on track to graduate from primary schooling successfully by 2015. This remains far from the truth for many countries in Sub-Saharan Africa, and in some parts of South Asia.

The commitments to Education For All should have resulted in a more equitable participation in basic education; lower levels of gendered inequity; smaller variations in enrolment rates between rich and poor and urban and rural areas; and a smaller spread of achievement between the best and worst performing schools. It should also have reduced the proportions of children who are significantly overage for their grade.

But our research shows that this has often not been the case. Sub-Saharan Africa remains by far the most undereducated part of the world despite allocating proportionally as much or more finance than other regions to education. In South Asia growing inequalities have accompanied economic development and led to very uneven access to basic education and continued marginalisation of the poorest.

In a little more than two decades, governments and development agencies have twice fallen short of aspirations to ensure all children complete schooling successfully. This is a tragedy. It betrays the promises made in 1990 and 2000 to those who were children then, and who are now young adults.

If all children are to attend school regularly at the right ages and reach levels of achievement that national norms identify, then consistent action is needed tailored to different national systems. CREATE has generated a Twelve-point development programme that identifies actions critical to making the right to education a reality.

The targets to universalise access to education in the region will not be achieved and will be revised at some point before 2015. Any new targets, which will probably be set for 2025, need to recognise that access is more than enrolment and that quality, equity and valued outcomes are inseparable if meaningful access to education is to be achieved.

Most of what needs to be known to universalise access is known but is often not applied in practice. The most powerful reasons why so many children miss out on their right to a basic education lie with the political economy of commitments to widen access to opportunity, mobilise domestic resources, and manage public services effectively towards clear goals.

There are no good reasons why all children will not attend and complete basic education successfully in 2015. If it does not happen it will be testimony to the failure of one generation of adults to believe in the futures of the next.

CREATE Twelve Point Development Programme

1 improving early childhood health to reduce undernutrition, stunting, parasitic infections and avoidable causes of disability;

2 ensuring that all children enter school during their sixth year;

3 acting on the causes of dropout on both the supply and demand sides;

4 diagnosing the silent exclusions that result in enrolment with little learning achievement and tracking children's progress systematically;

5 managing increased access to secondary schooling at affordable costs;

6 promoting effective pedagogies suited to teacher capabilities and the realities of school and class size;

7 building adequate numbers of school buildings and classrooms with basic services;

8 providing enough learning materials fit for purpose;

9 training and deploying sufficient teachers to provide opportunities to learn which do not vary greatly from school to school;

10 using assessment to monitor and improve learning;

11 making available adequate financing for balanced pro-poor educational growth;

12 developing indicators of progress that monitor equity and efficiency and widening access to all levels of education.

The Programme of Research

The programme of research uses the concept of **zones of exclusion** to frame analysis of access issues. There are six main zones covering those who do not attend school at all, drop outs at primary and secondary level, and those in school attending irregularly and achieving little. It also employs **an expanded vision of access** to education that includes learning that has utility, and which is inclusive, equitable and sustainable.

Access to education has to include judgements of educational quality and process (what children have access to); and of educational outcomes (what competencies and capabilities are acquired and how they are valued). CREATE's expanded vision includes local access to safe schools with an appropriate environment for learning; admission and progression at an appropriate age; regular attendance; access to secondary education; learning outcomes that meet national norms; and socially equitable access to affordable educational services of quality.

CREATE's **architecture of key concepts** includes the zones of exclusion and the expanded vision of access. It also highlights a wide range of issues that include age-of-entry and age-in-grade progression; typologies of drop out; small schools and multi-grade pedagogies; transitions to post primary; private providers: silent exclusion of those enrolled but learning little; analysis of supply and demand side constraints, inequalities associated with improved access and exclusions related to poverty and costs; child friendly and child seeking schools; exclusions related to gender, disability and other forms of marginalisation; needs for better data on participation and for child tracking, and for indicators that capture poor distributions of service delivery.

The Five Strands of CREATE

CREATE has five **programme strands** leading to research outputs.

1. **'Pathways to Access' Research Monographs (PTAs) on twelve themes**
   The themes are:
   - ★ Changing Patterns of Access
   - ★ Health, Nutrition, Disability
   - ★ Drop Out and Push Out
   - ★ Migration, Seasonality and Nomads
   - ★ Small Schools and Multi-grade
   - ★ Transitions to Secondary
   - ★ Educational Quality and School Processes
   - ★ Equity, Poverty and Exclusion
   - ★ Private and Non-State Providers
   - ★ Planning and Governance
   - ★ Aid Architecture
   - ★ The Political Economy of Education for All
2. **Country Analytic Reviews, Research Reports, and Policy Briefs**
   These reports synthesise and consolidate findings, review evidence and reach policy relevant conclusions.
3. **Community and School Studies**
   Empirical studies based on large scale data sets from CREATE household surveys, school surveys, achievement tests, case studies, and tracking in school and out of school children.
4. **Changing Patterns of Access** over time analysing multi-country large scale data sets.
5. **Political Economy of Education for All** based on country case studies, documentation and high level key informant interviews.

Learning together

Looking to learn

Research Questions

The research was framed by six general questions.

- What are current patterns of access and exclusion, who is currently excluded from basic education at different stages and why are they excluded?
- What strategies are most effective in meeting the basic educational needs of the excluded?
- What options are available to improve enrolment, progression, and completion rates? How can drop out be reduced and re-entry be encouraged?
- What options exist to improve transition rates and participation in lower secondary education?
- How have patterns of access been changing and has expanded access improved equity? What does analysis of cross national data uncover about how to accelerate progress towards EFA?
- What are the political, social and economic conditions which have facilitated universal access to education? Where progress has faltered what are the reasons?

These questions were complemented by a wide range of other research questions linked to a series of enquiries especially relevant to different national contexts, and to the cross national analyses of large scale data sets.

Expecting to learn

The programme of research has taken many forms.

The **Pathways to Access** accumulation of research monographs provide an extensive portfolio of research based insight and analysis into educational access broadly defined. These analytic papers capture a wide range of research activity that includes analytic reviews, commissioned studies with empirical data, analyses of secondary data, and syntheses from Doctoral work.

The **Country Analytic Reviews and Research Reports** are specifically focused on issues at national level as are the country based **Policy Briefs**. These are complemented by generic policy briefs of wider relevance.

The **Community and School Studies** included extensive fieldwork, data collection and analysis. A multi-method design was developed with a portfolio of ten instruments close coupled to research questions, zones of exclusion and methods of data collection.

In India over 6,400 households were surveyed in three districts, and data was collected on 9,000 children, and on teachers in 90 schools. Children were tracked over four years. In Bangladesh 6,700 households were surveyed, and fieldwork was undertaken and over 6,000 children tracked in 36 schools across six districts over three years. In Ghana 2,500 children in 29 schools in two different districts were identified and tracked and their households were surveyed between 2007 and 2010. In South Africa 14 schools in two provinces were selected and 1,400 children were profiled.

CREATE has produced **75 Research Monographs, four Country Analytic Reviews, four special issues of refereed journals** (Comparative Education, International Journal of Educational Development, Journal of Educational Policy, Prospects), **six newsletters**, and **25 policy briefs**. It will publish **seven books** by the end of 2012. The research outputs will also include **22 DPhils/PhDs** based in the UK, and others located in partner institutions.

CREATE supports a large scale programme of **capacity building**. There are over 40 CREATE research associates and 22 post graduate students, six of whom are Commonwealth scholars. CREATE provides technical support to its country based research teams. It also sustains a communications network to project outputs from the research at local, national and international levels. Its **website** includes a searchable data base on access with over 8,000 items and over 150 research products. The publications and activities of the programme or research are available free at **www.create-rpc.org**

CREATE Concepts

Access to education lies at the heart of development and is central to the Millennium Development Goals. A lack of education is both a part of the definition of poverty and a means for its diminution. The achievement of universal basic education is essential to reduce poverty, increase equity and transform the developmental prospects of individuals and nation states. Sustained access to education which transfers knowledge, skills and attitudes to the next generation is critical to long term improvements in productivity, the reduction of inter-generational cycles of poverty, demographic transition, preventive health care, the empowerment of women, reductions in inequality, and many other developmentally desirable goals.

CREATE has developed a model of zones of exclusion from education which it has used to shape its research in communities and schools and as a tool for policy dialogue (Lewin 2007a). In each of the zones the patterns and causes of exclusion from education are likely to be different. They may also be different from community to community. The model charts participation by grade and identifies different groups of children of school age that fail to sustain access to basic education. Figure 1 presents the generic chart.

Zone 1 contains those who never attend school. It includes those who could attend existing schools but do not, and those who are excluded by livelihoods, location, civil status, disability, social stigma or other vulnerabilities.

Zone 2 includes the majority of children who are excluded after initial entry, who drop out of school and fail to complete a full cycle. In an increasing number of countries these are the largest numbers of out of school children.

Zone 3 includes those in school but at risk of drop out, most obviously as a result of low achievement and poor attendance. These children can be described as "silently excluded" since they are enrolled but may learn little, attend irregularly, and/ or are over age.

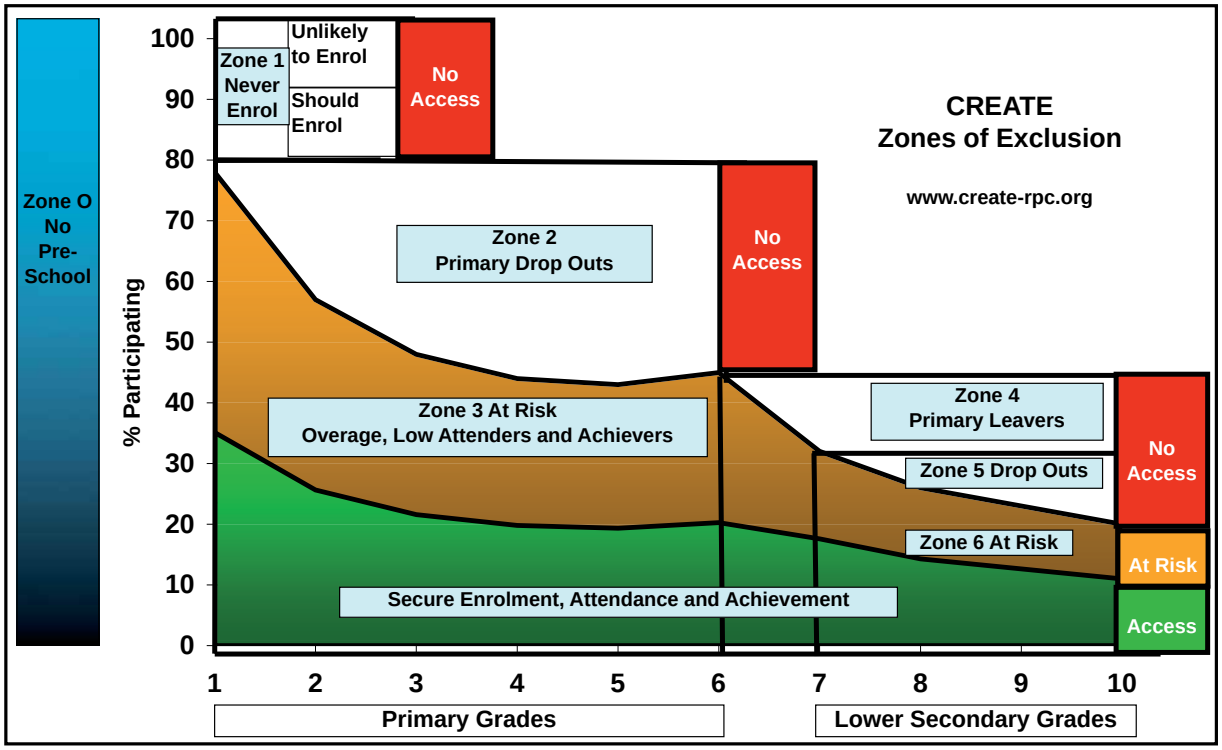
Zone 4 contains those who fail to transit to secondary education as a result of failing to be selected, being unable to afford costs, or located far from a secondary school, or otherwise excluded.

Zone 5 includes those dropping out of secondary grades.

Zone 6 contains those at risk of drop out from secondary school.

Zone 0 captures those excluded from pre-school.

Figure 1 CREATE Model of Zones of Exclusion



An Expanded Vision of Access

CREATE has generated an expanded vision of access to go beyond the narrow indicators of school enrolment rates which are used by development partners and governments (Lewin, 2011b). Access to education has to include judgements of educational quality and process (what children have access to); and of educational outcomes (what competencies and capabilities are acquired and how they are valued). An expanded vision has to be interpreted in relation to national and sub-national contexts. These determine starting points for improved access, identify the nature of excluded groups, the resources available, and the policy environment and possibilities for action. CREATE's expanded vision of access includes:

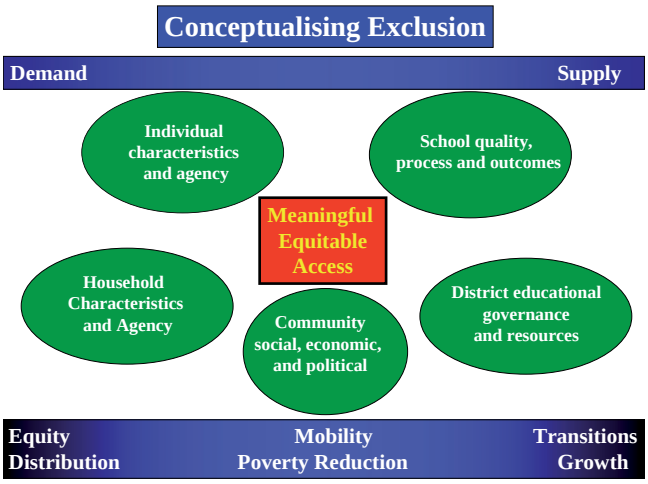
An Expanded Vision of Access

- Access to preschool at affordable costs
- Local access to safe schools with appropriate levels of staffing, learning materials, and facilities (including clean water and sanitation) which provide a positive learning environment
- Admission and progression through primary school within a year of the nominal age-in-grade
- Consistent attendance throughout the school year at least 90% of school time
- Learning outcomes that have utility and relevance and achievement that meets national norms
- Reasonable access to secondary education and training
- Equitable access to affordable schools of adequate quality

CREATE's architecture of key concepts includes zones of exclusion; the expanded vision of access; age in grade progression; small schools and multigrade issues; transitions to post primary; silent exclusion; analysis of supply and demand side constraints on access, the development of child seeking schools; and the use of distributional targets linked to poverty, equity, and effective learning of knowledge, skills and attitudes.

Conceptually, exclusion has a range of causes that lie at different levels of analysis. These can be mapped schematically to include individual and household characteristics, community level attributes including livelihoods and social preferences and practices, school level features and aspects of local and national level educational administration and resource availability. These interact to shape meaningful and equitable access (Figure 2).

Figure 2 Model of Meaningful and Equitable Access



Educational access is a problem on both the supply and demand sides of provision. Some Education for All programmes have concentrated on inputs where infrastructure is weak, buildings and classrooms inadequate or unavailable, learning material in short supply, and teacher qualification is low. These inputs are often greatly needed where enrolment growth is strong.

However, access problems also arise from failing demand, especially amongst older children and in communities where the opportunity costs of school attendance are high, and where school quality is low. Where access is very unevenly provided, such that for example the poorest children may have less than a tenth the chance of the richest of completing secondary schooling, then equitable access is compromised.

To be worthwhile and have utility, access must lead to transformations in capability that are linked to the knowledge and skills that can enhance the chances of mobility out of poverty.

Zones of Exclusion in Four Countries

The zones of exclusion model can be applied at national level. This gives an illustration of how it can be used to conceptualise starting points and key issues (Figure 3 and 4).

In Bangladesh there are more children enrolled in Grades 1-3 than there are in the relevant age group (shown by the dotted line). This is indicative of over age and some under age enrolment, and repetition of grades. Enrolment in Grade 1 is consistently about 30% more than it would have been had no child repeated. Above Grade 4 there are fewer children enrolled than in the age group. It is now the case that there are about the same number of girls as boys enrolled, unlike a decade ago when there was a significant gender gap. Bangladesh has a short primary system of only five grades. Its gross enrolment rate is over 90%. However, only 50% of an age group succeed in entering secondary school in Grade 6 successfully and only 15% or so reach Grade 11 and 12 (Ahmed et al 2007).

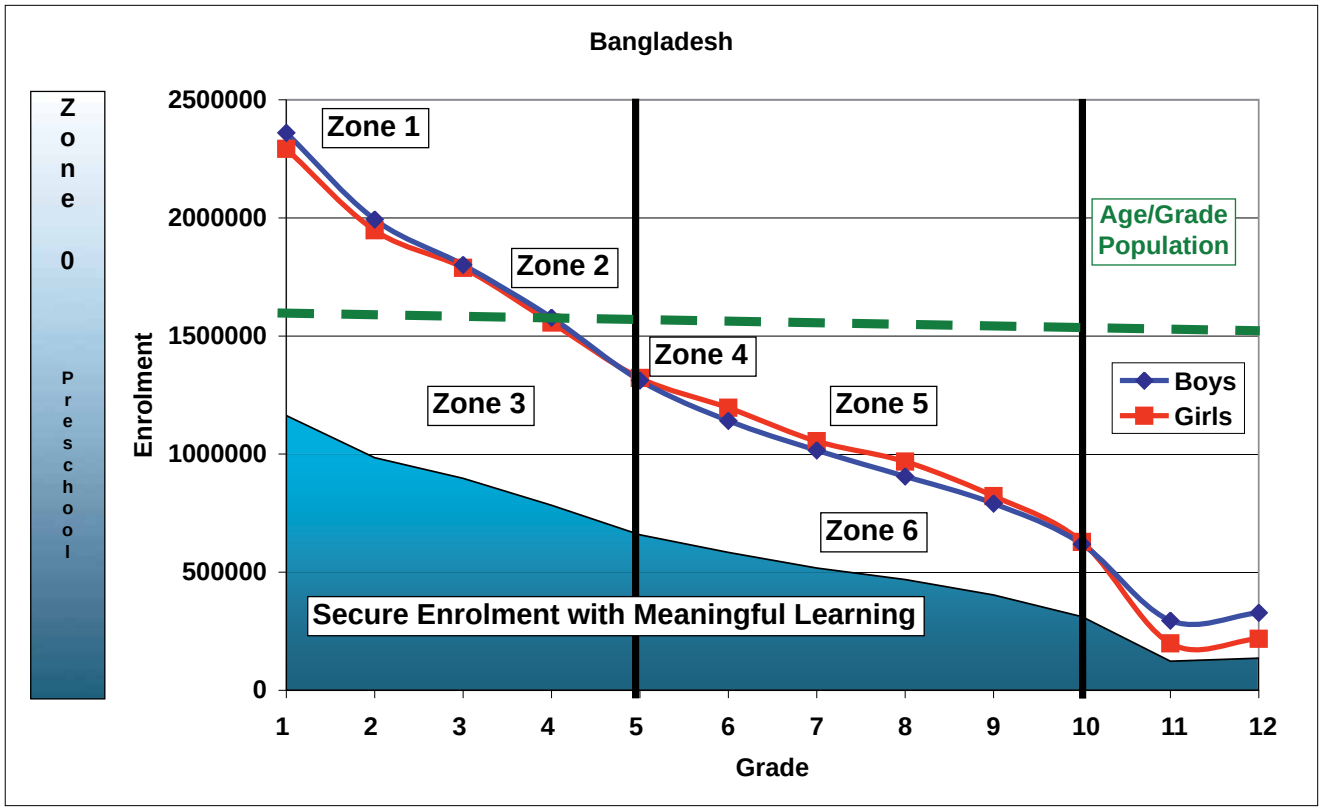
Eager to get to school in Bangladesh

The zonal chart for **India** shows that at national level there are clearly issues that remain despite the gains achieved under India's large scale EFA programme Sarva Shiksha Abhiyan. Less than 60% of children complete Grade 5 on average and no more than 40% succeed in entering Grade 9. Above Grade 3 there are fewer enrolled than there are in the age cohort. There is a large difference in enrolments between boys and girls. The gap widens up to Grade 10 but above this girls drop out less than boys (Govinda et al, 2007). There are fewer girls than boys in the population. In some parts of some states various forms of gendered foeticide and migration result in sex ratios as low as 800:1000. The all India chart conceals the great differences in enrolment patterns between states, especially the low enrolment northern states and those in the south where most children attend secondary school, and between children of low caste households and other groups.

Morning assembly in a rural school in India

In Ghana in the first three grades there are more enrolled than in the age group. Though nearly equal numbers of boys and girls enter Grade 1, girls drop out faster until Grade 6. If they enter junior high school they drop out less than boys (Akyeampong et al, 2007). Above Grade 9 at entry to senior secondary school there is rapid attrition as costs rise and schools become very selective. By Grade 9 less than half the age group is enrolled. Moreover it remains the case that about 80% of all university entrants originate from only 20% of the secondary schools. Most have attended fee paying high cost private schools (Djangmah, 2011). Ghana has a distance to travel to achieve basic education for all. Access is inequitably distributed and quality varies widely.

Figure 3 Zones of Exclusion in Bangladesh and India



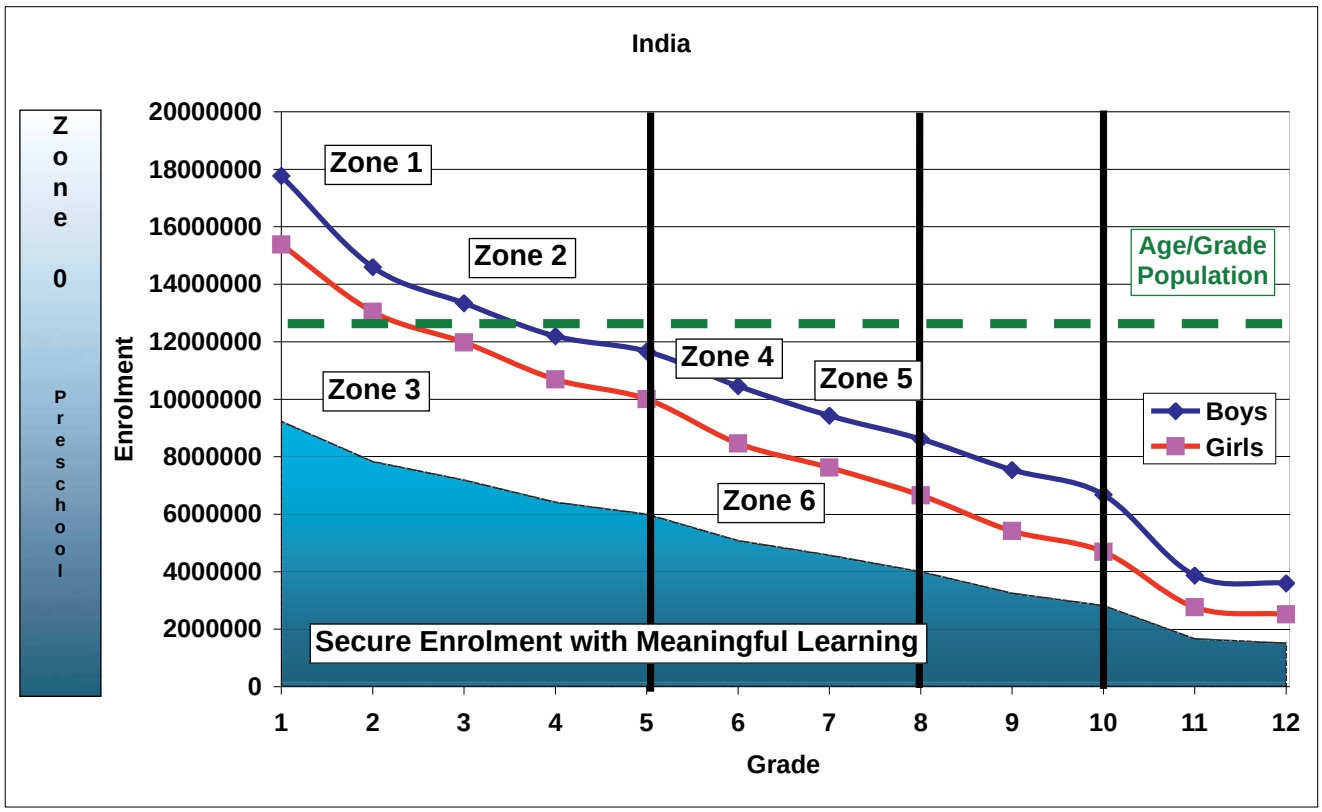
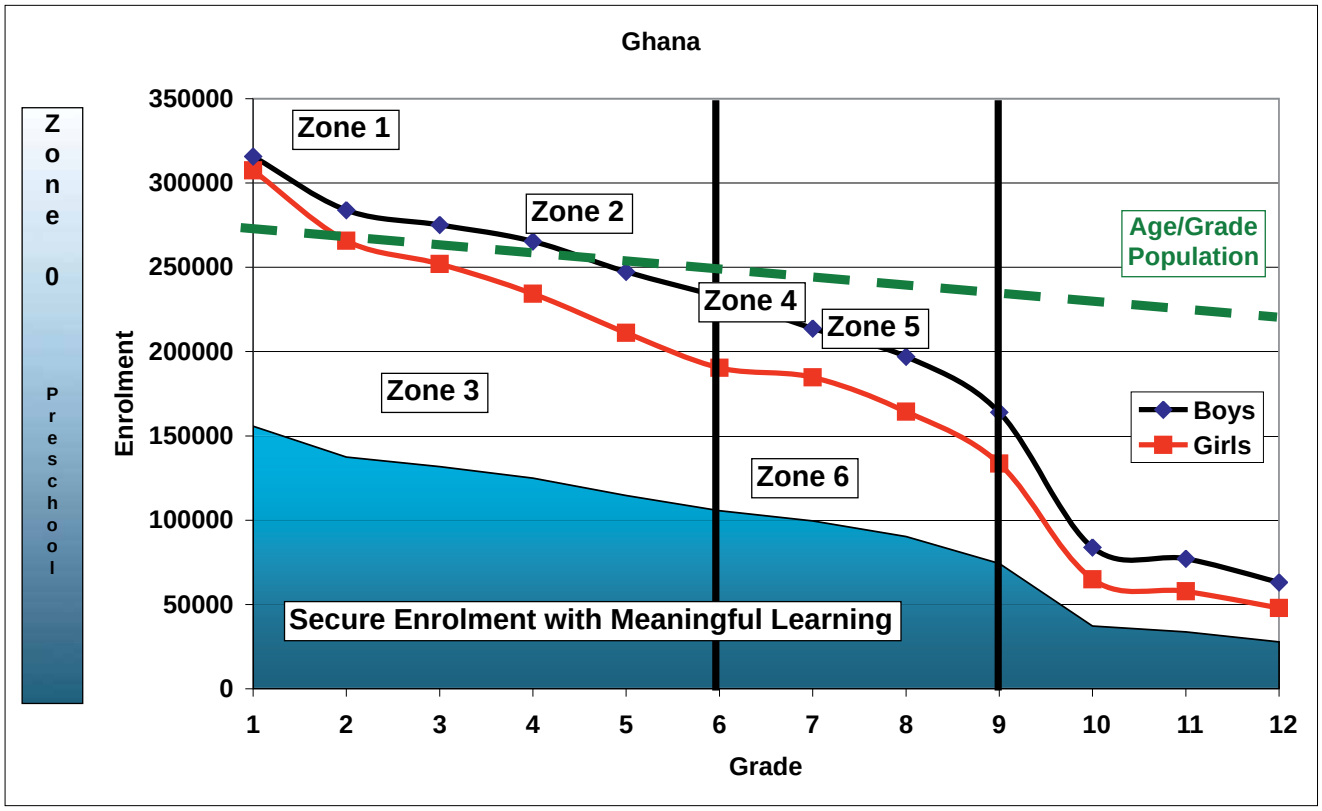
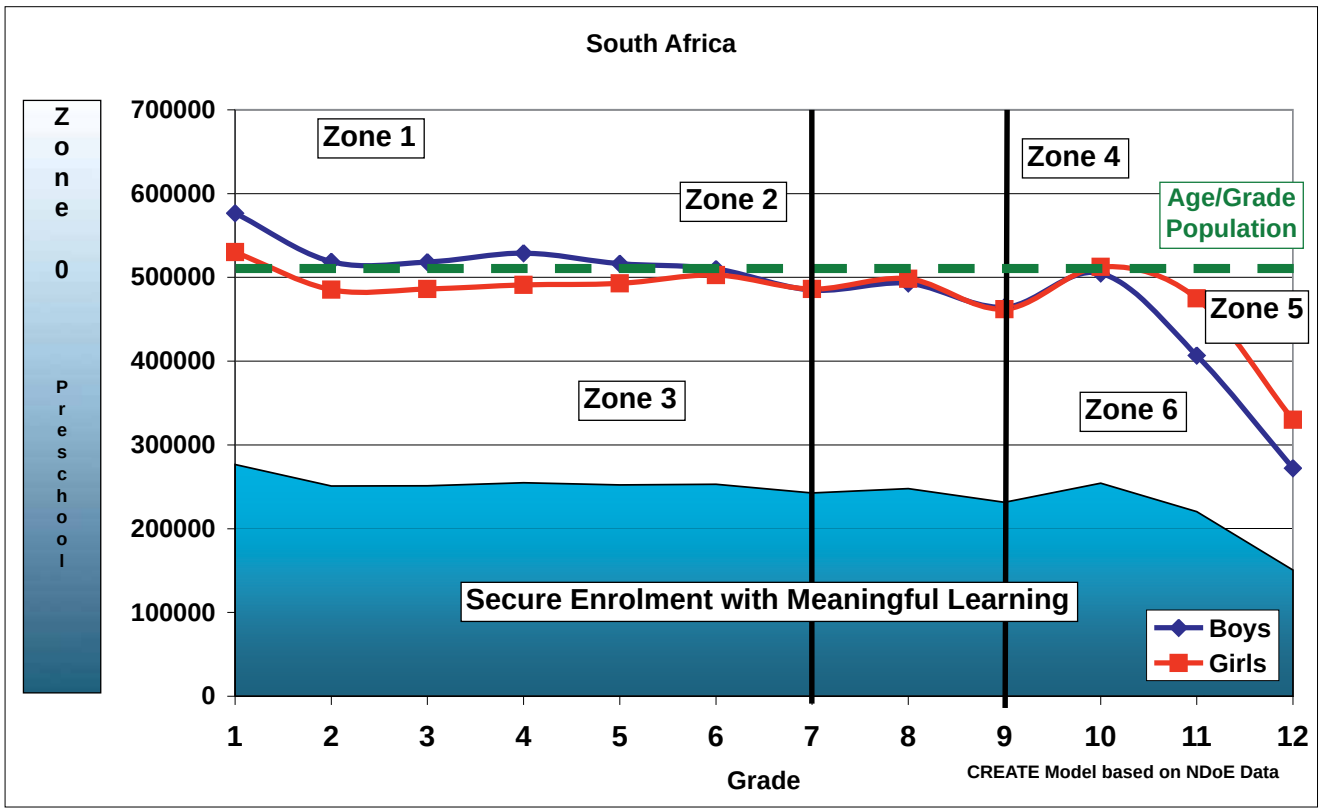


Figure 4 Zones of Exclusion in Ghana and South Africa





Waiting for school to open in Ghana

South Africa has almost full enrolment of the school age group. The age of entry has been reduced by incorporating a reception year (Grade R) into the normal primary cycle. From Grade 1 to 9 there are as many or more enrolled as there are in the age group. Above Grade 9 there are more girls than boys enrolled which is also the case in several other southern African countries. Attrition accelerates above Grade 9 as students enter the further education and training level and study for national examinations. Many drop out before completing Grade 12. Below this level progression has been unhampered by selection examinations that block progression of low achievers. Though enrolment is high, achievement is often low (Taylor et al 2010, Motala et al 2011, Gilmour et al 2009).

Cross Country Comparisons

In all four countries the numbers of children who never enrol are fewer than 10% and may be less than 5% of all children. Most 5-15 year olds claim to be enrolled. Those who are not include those excluded because of their civil status (e.g. illegal cross border/internal migrants) and those made invisible as a result of social exclusions (e.g. social and ethnic group, disability, HIV status, nomads). Those in zone 2 (drop outs) are the greatest number out of school. By Grade 9 more than half the children are no longer in school in three of the countries.

In zone 3 children are enrolled in primary but judged to be at risk and learning little. This is signified by low attendance (less than 90% of the school time) over age (two years or more) and low achievement (two years or more behind). In South Africa many children do not attend regularly. Over a third are over age by two years or more in Grade 4. And levels of achievement are often problematic with more than half at least two years behind by Grade 6 (Gilmour et al, 2009, Taylor et al. 2010). In case study schools in Madhya Pradesh in India an average of 35% of students were not in school on the day of the visit by researchers (Bandyopadhyay, Das and Zeitlyn, 2011). In low enrolment rural areas of Ghana, the majority of children in schools are over age by two years or more (Rolleston et al, 2011). In Bangladesh in the rural primary schools surveyed, about half of all students in Grades 1-5 were two years or more overage (Zeitlyn and Hossain, 2011). Indications of poor attendance, over age progression and low achievement are endemic across our field data from schools and communities.

Zone 4 identifies children who fail to make the transition from primary to lower secondary. Transition rates from primary to secondary in all the countries are over 80%. However, in all cases except South Africa so much drop out has already taken place through the primary school grades that no more than 50% enter secondary school. Transition to secondary school often involves travel and additional costs which are a disincentive to continue (Siddhu, 2010). Drop out from secondary (zone 5) can be an important issue. Low achievement and rising opportunity costs linked to income earning employment can lead to drop out before completion. Poor learning achievement of those enrolled in secondary (zone 6) is an issue especially where there are no standardised assessments that allow national monitoring of standards.

Some pre-schoolers getting a head start in South Africa

Changing Patterns of Access

Research on changing patterns of access analysed large scale cross national data sets to understand the evolution of participation, why universalising access has proved so elusive, and what lessons can be learned from the last thirty years (Lewin, 2011; 2009; 2007a, b; Somerset, 2007; Little 2010a, b, c; Rolleston, 2009a, b; Lewin and Sabates, 2010; Oketch and Somerset, 2011; Chimombo, 2009; and Akyeampong, 2009).

Enrolments by Year

Several patterns emerge from the data. Figure 5 illustrates these using data up to 2010 for a sample of cases. More can be found in Lewin, 2009 and Lewin and Sabates, 2011. In Uganda Universal Primary Education (UPE) was announced in 1997 and enrolments in Grade 1 more than doubled. Many of these Grade 1 children did not arrive in Grade 7 seven years later as the cohort track shows. The system reached a new equilibrium with high drop out and many over age children. The numbers reaching Grade 7 in 2007 were only about half the number in an age cohort. In the last two years there appears to have been an acceleration of enrolment growth in grades 6 and 7 as a result of new efforts to meet enrolment targets in advance of 2015. Completion rates remain well below those necessary for EFA to be achieved. Indeed the data shows that there was much "queuing" in Grade 6 as schools kept back children likely to fail the Grade 7 primary school leaving certificate (Lewin, 2007b).

In Malawi a similar patterns is evident with over enrolment in Grade 1 persisting year after year. The proportion of students graduating from Grade 8 has remained fairly similar despite a dramatic increase in total enrolments, and remains about a quarter of those enrolled in Grade 1. Attrition remains alarmingly high (Chimombo, 2009) and there is no sign it is diminishing.

Kenya also has a similar if less extreme pattern of enrolment growth. The most recent announcements of free primary schooling have generated peaks in enrolments in Grade 1 which are not fully translated into peaks in subsequent Grades indicating that not all progress. Grade 8 has at least 20% fewer enrolled than Grade 7 indicating as in Uganda that queuing is taking place in Grade 7 as schools hold back those unlikely to do well in the primary leaving certificate.

Tanzania has had two attempts at UPE and this is clearly visible in the chart. The last attempt appears more successful than the first when large enrolment gains were followed by a steep fall off in participation in the 1980s (Lewin, 2009, Sabates, et al., 2011b).

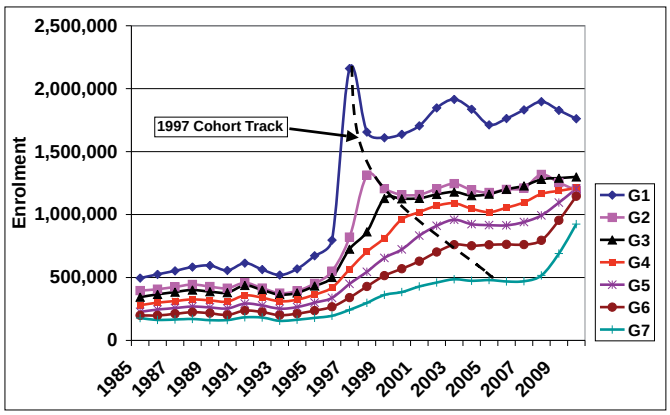
In Tanzania there were clearly two waves of enrolment growth linked to attempts to universalise primary education. The progress made in the late 1970s after the Arusha declaration stalled in the 1980s. It was revitalised by the 2002 initiative to make primary school free and available to all. Rapidly increasing enrolments in Grade 1 have been reflected in greater enrolments in higher Grades and in a narrowing of the gap between enrolments in Grade 1 and Grade 7 (Lewin,2009, Sabates et al, 2011b).

In Ghana Free Compulsory Basic Education (FCUBE) led to enrolment growth with only a small step upwards in the late 1980s. The gap in enrolments between Grade 1 and Grade 6 has remained fairly constant over 20 years, suggesting drop out and completion rates failed to improve. Fee free schooling linked to capitation payments to schools had an impact on enrolments in 2005. This appears to be a one time gain in total enrolments which is being sustained. However it does not appear to have had much effect on attrition (Akyeampong, 2011). In Zambia enrolment growth in Grade 1 has stabilised since 2007 after a period of growth linked to the most recent announcements on free primary schooling. Grade 7 enrolments remain about 60% of those in Grade 1.

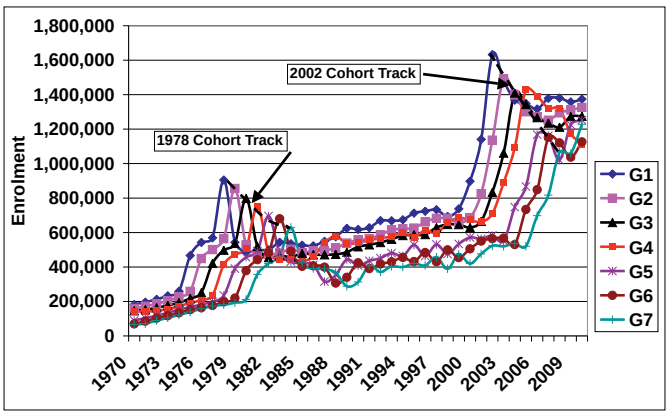
Data on two Indian States shows a contrast between Madhya Pradesh, which has low enrolments and high attrition, and Andhra Pradesh which has high levels of enrolment and low drop out to Grade 8. In the former the impact of Sarva Shiksha Abhiyan is evident with a substantial increase in Grade 1 enrolments in 2004/5. Increases in lower Grade enrolments are yet to be translated into similar increases in higher Grades. This is a serious constraint on expanded access to secondary schooling (Lewin, 2011b) which has become a priority under Rastriya Madhyamik Shiksha Abhiyan. In Andhra Pradesh it is clear that numbers in Grade 1 are falling as a result of demographic transition. The proportion of those entering Grade 1 who reach Grade 8 is increasing rapidly as drop out falls.

Figure 5 Enrolments over Time: Sub Saharan Africa and India

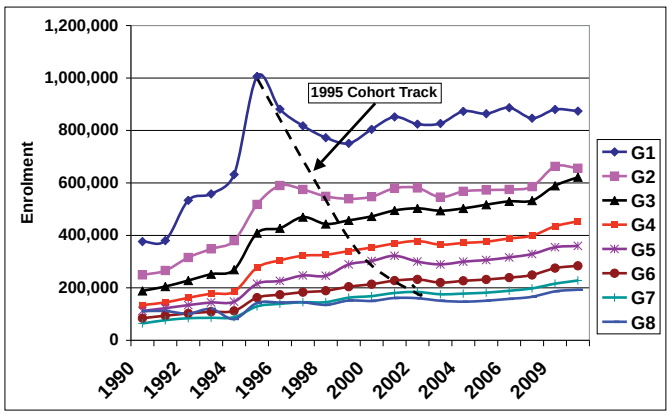
Uganda



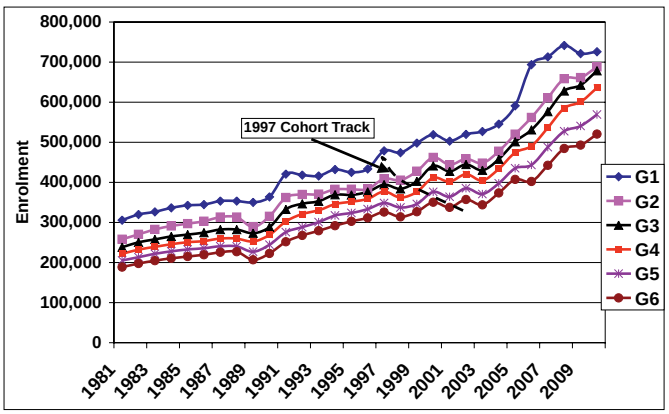
Tanzania



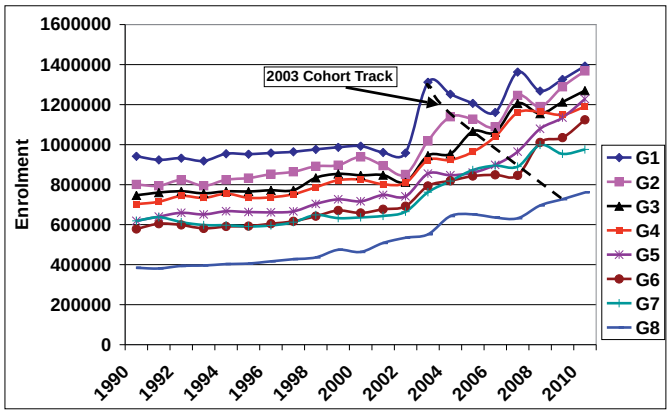
Malawi



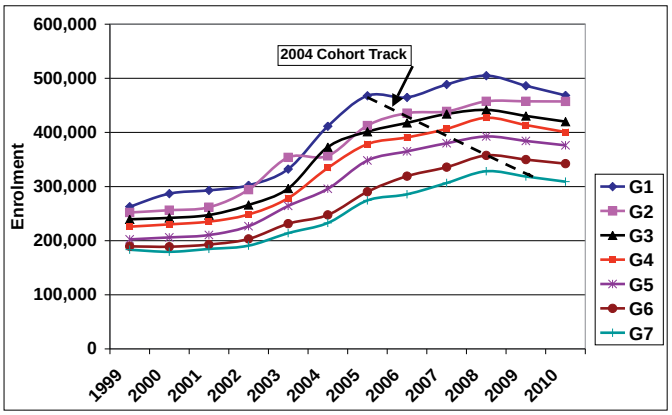
Ghana



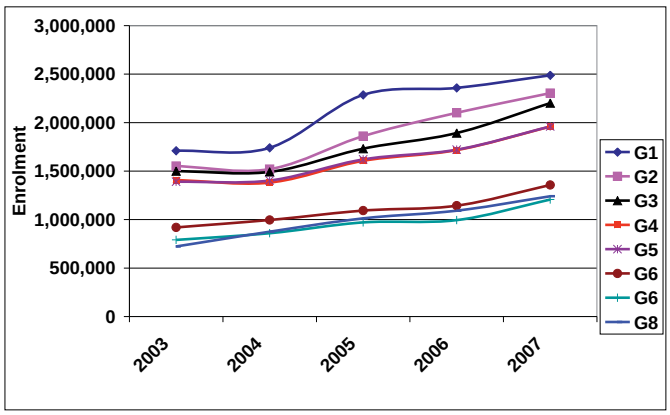
Kenya



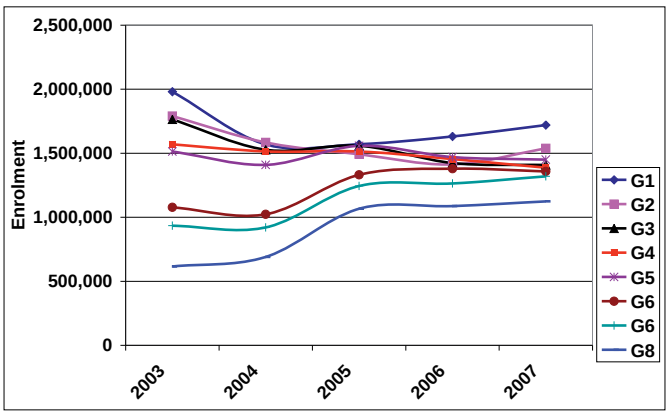
Zambia



Madyha Pradesh – India



Andhra Pradesh – India



Patterns of Enrolment by Grade

Patterns of enrolment by grade fall into several different categories. A simplified typology is shown in Figure 6. In Type 1 countries the grade specific participation rate – the number enrolled over the number in the nominal age group for the grade - is a little over 100% in Grade 1 and falls slowly with increasing grades. Secondary level participation also has grade specific enrolment rates close to 100%. These countries mostly have virtually full enrolment and include South Africa, Namibia, Botswana, Mauritius, Sri Lanka, southern states in India, and most parts of China. In some cases where there are substantial numbers of over age children in the system, grade specific enrolment rates can be around 100% for each primary grade but significant numbers may remain out of school, especially at higher grade levels e.g. South Africa.

In contrast, countries with enrolments like Type 2 have as many as twice the number of children enrolled in Grade 1 as there are in the population. Many are over age and a few are under age. Attrition is sharp and leads to the participation rate falling along a convex curve to around 50% by Grade 6 and continuing to fall in higher grades so secondary participation is low. Many countries with high growth in enrolments after the announcement of universal primary education (UPE) have experienced patterns of enrolment similar to Type 2 with very high grade specific enrolment rates in Grade 1. These countries include Malawi, Uganda, Kenya, and some northern states in India (Lewin, 2011b).

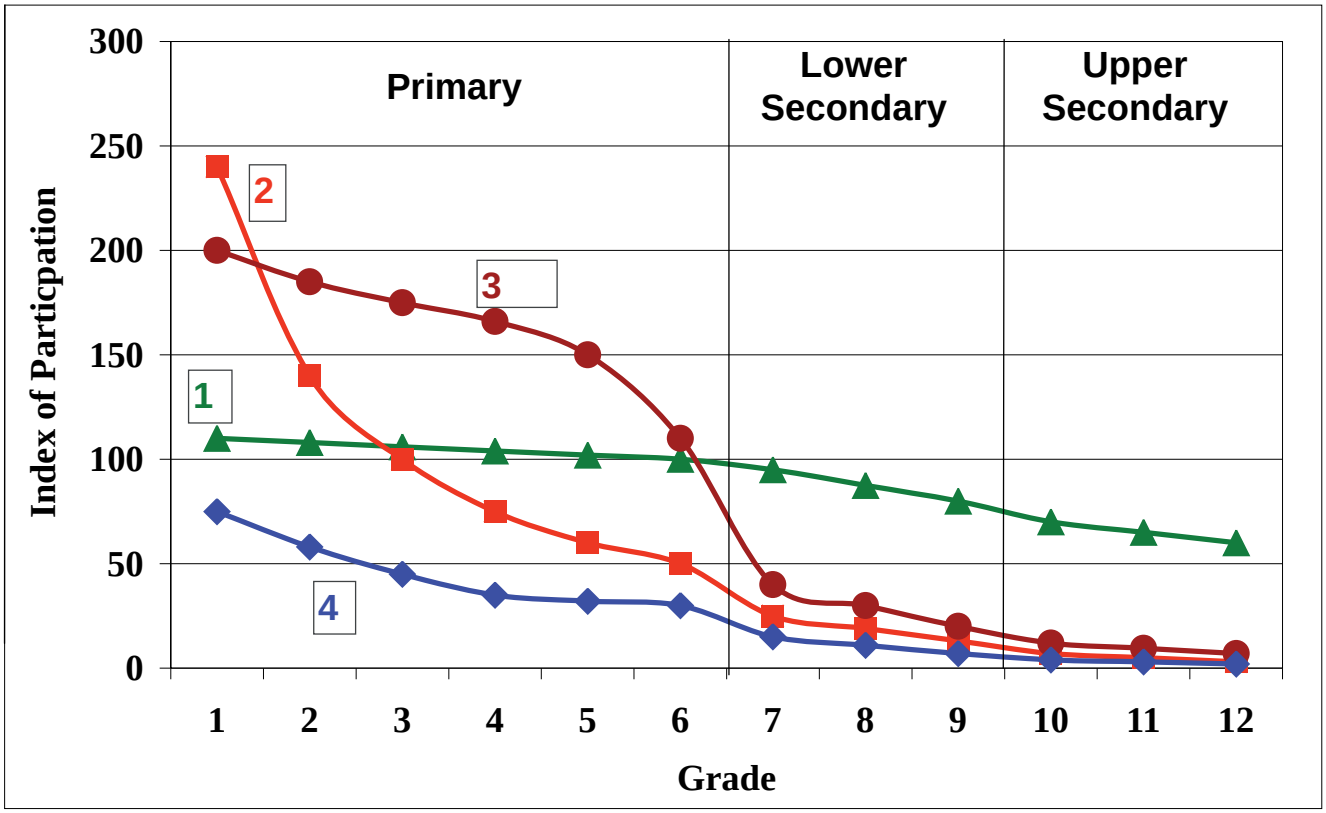
The third group of countries, Type 3, are similar except that the decline in enrolments through the primary grades follows a concave curve suggesting that retention in the early grades is high but that drop out becomes increasingly rapid in higher grades as in Ghana and Zambia.

Type 4 countries have very low enrolment rates at all levels. In these countries many do not enter Grade 1 and most fail to reach Grade 6. Many of these countries are in francophone Africa.

It is a reasonable assumption that the investments targeted at universal primary enrolment should result in Type 4 countries evolving through Types 3 and 2, to Type 1. The evidence is that at least in some cases patterns 2, 3 and 4 persist without evolving as quickly as policy often presumes will be the case (Lewin, 2009; Lewin and Sabates, 2011).

The conclusion is that big pushes to increase enrolments are often difficult to sustain. Their

Figure 6 Simplified typology of enrolment patterns in school systems



effects tend to be greatest in the lowest grades, and are often transient. Several years later growth reflects longer term trends related to demography and to growth in the economy and in infrastructure that enhances access to education. Increased participation overall, with little improvement in drop out rates and slow increases in successful completion, has been more common than was anticipated over the last two decades. Policy can accelerate development but needs to be developed in the light of understanding realistic patterns of progress.

Over Age Progression

Many children are over age for the grades they attend. In some poor areas more than half of children are over age by two years or more. In rural Africa it is common to assess school readiness by the size of a child especially where birthdates are unknown. In some of our household samples many children are stunted, almost guaranteeing late enrolment. Repetition of grades is endemic in systems which have low completion rates. This exacerbates the numbers of children overage. Girls are especially disadvantaged by being overage. No high completion system has a wide range of age in grade.

Age in grade is important because children of different ages reason in different ways. Younger children are largely concrete operational. Their reasoning is associative and usually only uses a single dimension. Late concrete thinkers can compensate and order relationships between two variables. Formal thinkers can understand causality with more than one pathway and can use simple models to understand relationships. Late formal thinkers can use abstract models to explore multidimensional relationships and

Children of between 6 and 11 years old in the same class in Ghana

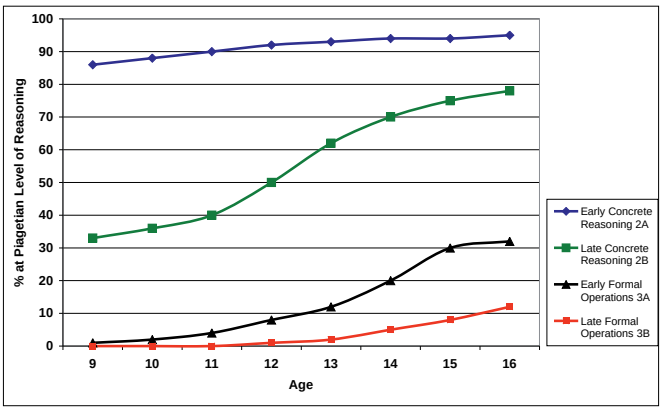


Figure 7 Piagetian Stages of Cognitive Development and Age in a UK Population (Shayer et al 1981)

make predictions. In the UK population almost all children can reason concretely though only about 80% are late concrete operational thinkers. About 30% are early formal operational reasoners and only 10% are late formal operational reasoners (Figure 7). In countries where there is a wide range of age in grade the curriculum and pedagogic issues are clear. The distribution of capability within an age group will be overlaid by the spread of capability related to age. Monograde curricula and pedagogy will not be best suited to wide ranges in reasoning capability.

Conventional measures of patterns of access conceal the way age in grade varies (Lewin, 2011d). The evolution of age in grade relationships is important for several reasons. First, children who enrol above the normal age of entry will miss learning experiences at a time when they are most receptive to learning basic skills and establishing secure foundations for cognitive development.

Second, those who repeat Grade 1 or subsequent grades will become over age for their grade. The more over age a child is within a grade the more it is likely that they will underachieve (Taylor et al, 2010).

Third, where older children are taught in class groups with younger children there may be psycho-social issues (e.g. of self esteem, bullying, sexual harassment) and problems of matching learning to cognitive capabilities (especially with monograde curricula where all pupils are taught the same things at the same time).

Fourth, over age children will be late to arrive at the last grade of primary or junior secondary school. Where the age of initial entry is six or seven, primary school leavers in a six grade system will be 12 or 13. If they are two years over age, they will be

14 or 15. This approaches the ages of entry to the labour market and of marriage. It is unlikely most will continue further.

CREATE has explored how enrolment patterns change with age. Figure 8 shows how participation can change with age and is linked to the CREATE zones of exclusion. This indicates that in this system, which is based on data from Ghana, about 40% of six year olds are not in school. This falls to about 10% by age 11. Above this age those who have not enrolled are unlikely to ever enrol (zone 1).

From age 7 and above some children drop out and the number gradually increases with age. These become the largest number of out of school children above 11 years old and fall into zone 2 of the CREATE model. Children who enrol but are at risk of drop out and are characterised as low attending, over age, repeating years and poor achieving fall into zone 3 and gradually become an increasing proportion of those still enrolled in primary grades.

From 12 years and above some make the transition into secondary school though if they fail to do this by the age of 15 or so it becomes increasingly unlikely that they will complete lower secondary successfully.

Data on age in grade illustrates common patterns (Figure 9). In Uganda over enrolment in Grade 1 includes children between the ages of 5 and 10 years. By Grade 7 the age range is between 12 and 20 years.

Similarly Malawi has a pattern of over age enrolment where the spread of ages within a grade increases greatly from Grade 1 to Grade 8. At the same time there is even more attrition than in Uganda with only a small minority surviving to Grade 8. Some children in Grade 8 are likely to be as much as 18 years old and would thus not complete junior secondary until they were well over 20 years old.

In Kenya age on entry may be as much as 10 or 11 years. By Grade 8 children are between 12 and 20 years old making it unlikely that the older children will progress to secondary school, especially if they are girls. The dispersion of ages increases with Grade making it likely that wide mixed age teaching groups will present a challenge to orthodox monograde pedagogies.

Tanzania provides a strong contrast. Here the data indicates that most children are within two years of the correct age for their grade. This is a striking change from the 1990s when the distribution of age in grade resembled other East African countries.

Figure 8 Age and Enrolment

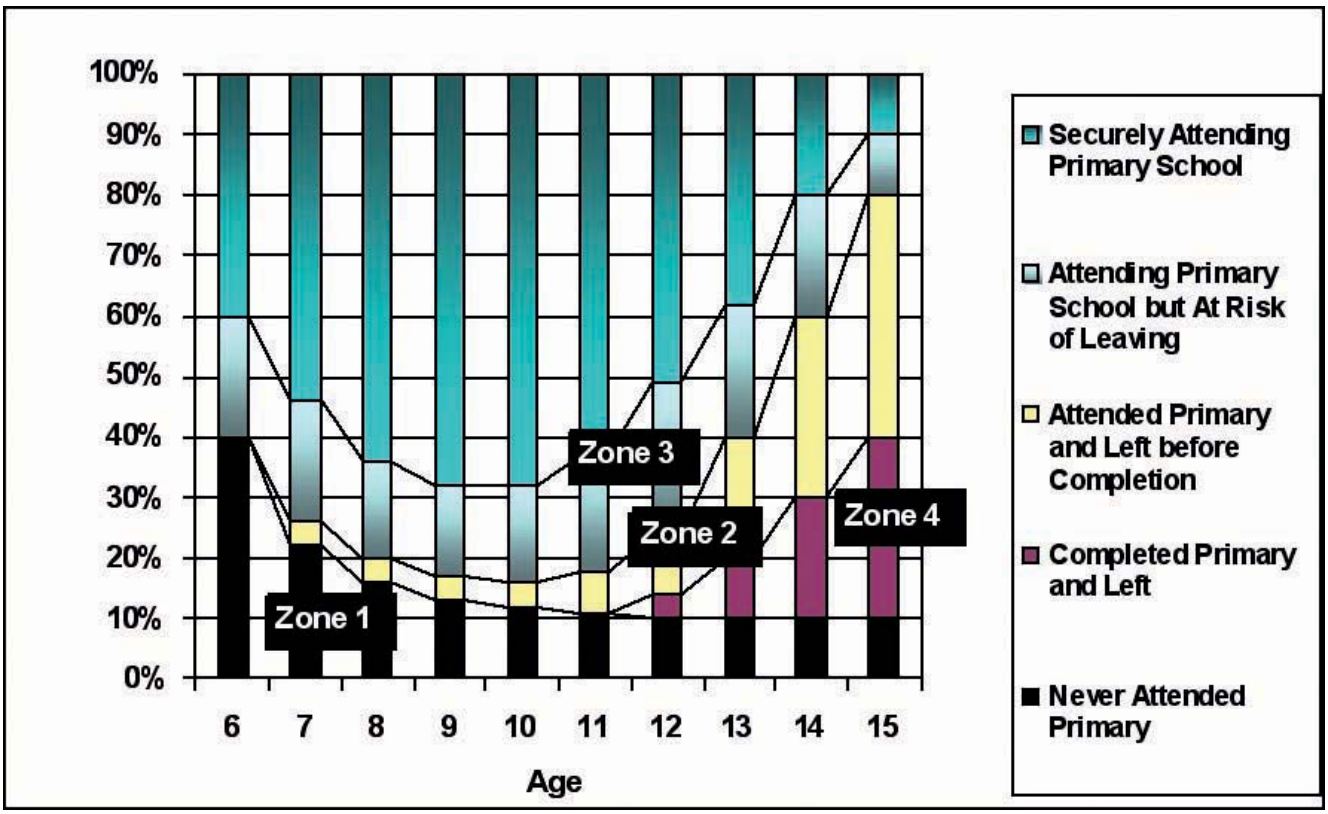
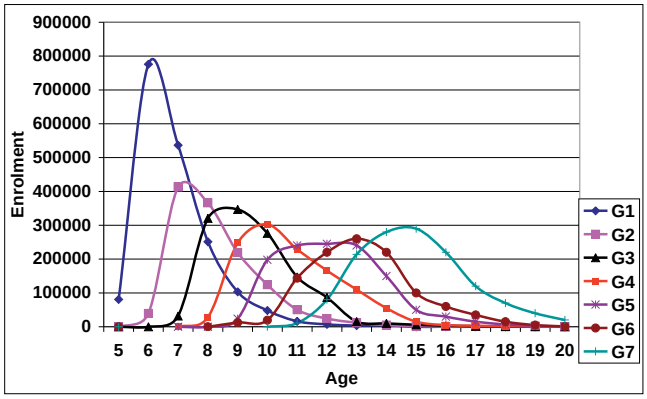
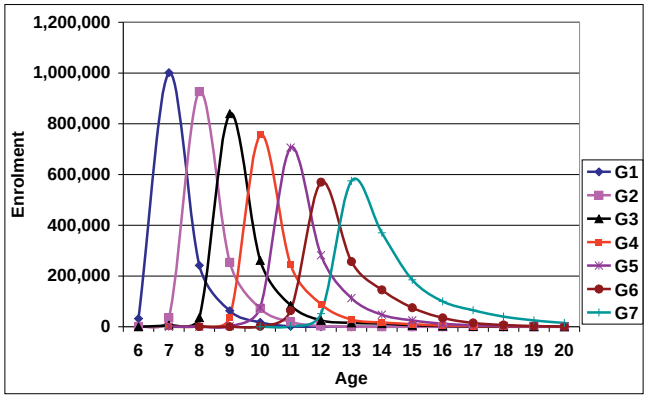


Figure 9 Age-in-Grade Distributions

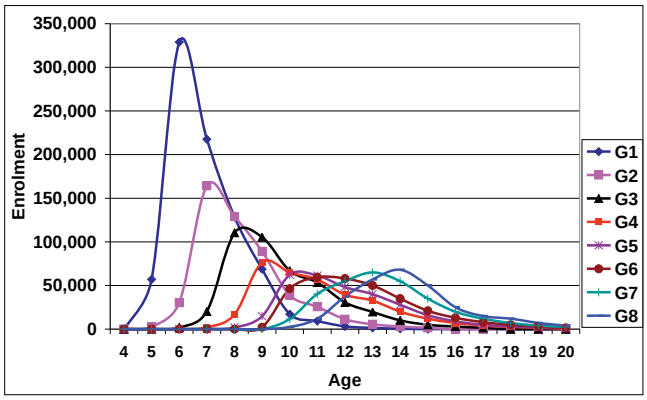
Uganda



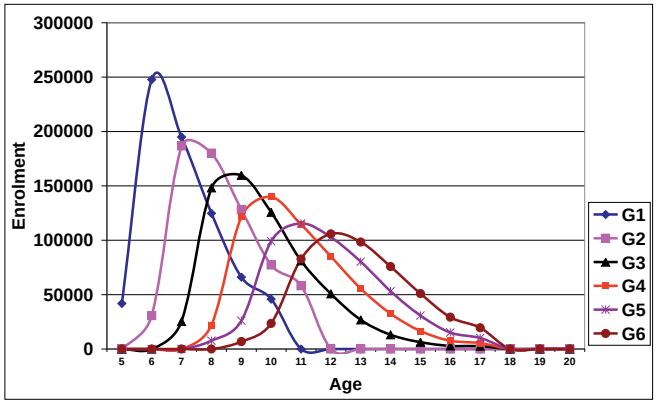
Tanzania



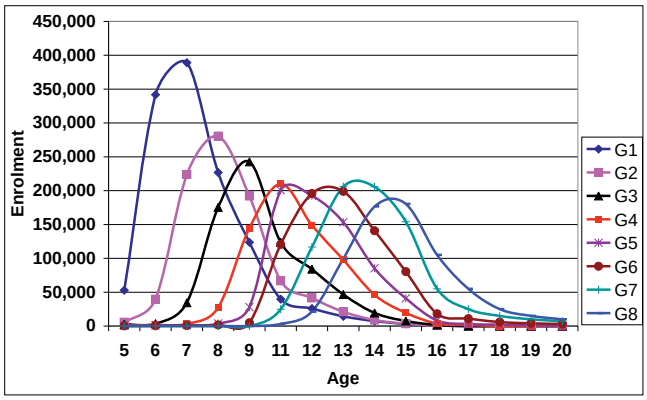
Malawi



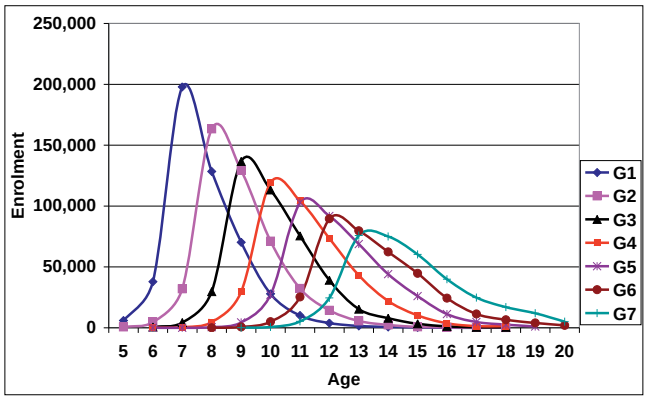
Ghana



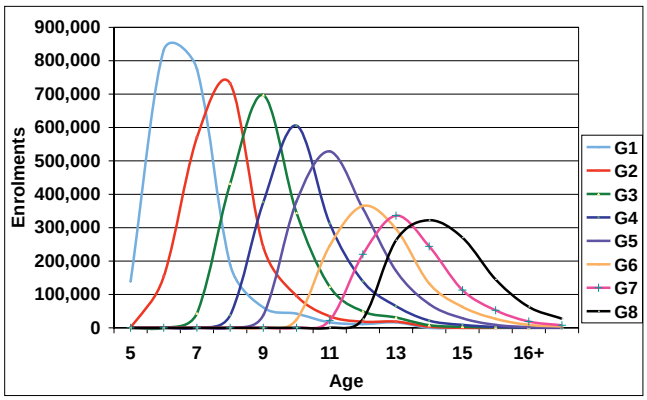
Kenya



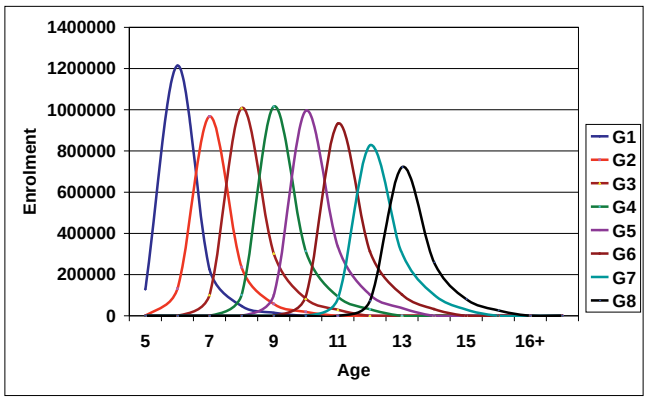
Zambia



Madhya Pradesh – India



Andhra Pradesh – India



Ghana and Zambia have similar profiles. In these countries there is a sequential reduction in enrolments by grade coupled with a widening of the range of age in grade from about five years in Grade 1 to eight years in Grade 6 or 7.

All these patterns can be found in different states in India. Madhya Pradesh resembles Ghana and Zambia. Andhra Pradesh is similar to Tanzania with every child in approximately the right grade for their age. Like Tanzania, Andhra Pradesh had a pattern similar to Zambia and Ghana in the 1990s.

There are many variations on these patterns. In most cases the dispersion in age within a grade increases with the grade level though primary school. Access to secondary schooling is selective. Often the process tends to select out those who are overage completing primary school. It can therefore be the case that age in grade dispersion is less at secondary level (Lewin and Sabates, 2011).

If the age in grade range remains wide it is inevitable that most will not complete primary and junior secondary. In Kenya every year overage is associated with a reduction in score on the primary school leaving certificate of about 7%. This ensures that very few who are more than two years over age attend effective secondary schools.

All countries or regions which succeed in universalising enrolment and completion of primary and junior secondary have low dispersions of age in grade. Ensuring enrolment and progression on schedule is a low cost lever on participation that offers large gains at modest costs.

Equity, Participation and Indicators

Equity in access to education remains elusive. Participation and progression remains strongly associated with household wealth despite commitments to pro-poor policies and investment of resources. Inequity manifests itself in many ways. Socio-economic status is strongly associated with lower probabilities of ever enrolling, progressing through grades at appropriate ages, reaching levels of achievement necessary to complete schooling successfully, and with subsequent access to labour markets that can provide secure incomes. Regional disparities remain striking in many African countries, and in India, with wide disparities in the quantity and quality of schooling. Urban rural differences persist and are increasingly accompanied by intra-urban differences associated with urban migration and the development of slums and temporary settlements poorly served by educational infrastructure.

Gendered patterns of exclusion are widespread but have been changing. Gaps in overall participation have been closing in many countries as enrolment rates rise. Participation in secondary schooling tends to favour boys in much of Sub Saharan Africa and South Asia, not least because boys tend to persist in education longer to older ages. Most countries that enrol more than half of their children in secondary schools have more girls than boys enrolled suggesting that in low enrolment countries discrimination against girls may be more marked (Figure 10). Other exclusions that have an impact on equity include those related to social group, ethnicity, caste, language, disability, orphanhood, civil status, and religion.

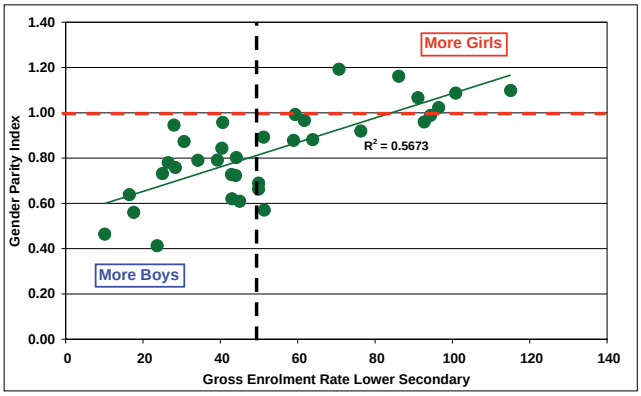


Figure 10 Gender Parity and Secondary Enrolment Rates in SSA

CREATE has explored evidence from 13 sub-Saharan African countries using national data from the 1990s and 2000s to compare patterns for enrolment over time (Lewin and Sabates, 2011). This analysis shows that though overall participation has increased, the chances of the children from the poorest households enrolling and progressing through school relative to the richest households have generally not improved substantially. In some cases they have deteriorated. Reductions in the number of children out of school have occurred but this has often been accompanied by an increase in the proportion of children over age for the grade in which they are enrolled.

Poorer children are more likely to be over age and unlikely to complete schooling especially if they are girls. Girls are more likely to be out of school than boys in most of the Francophone countries in the data set but not in most of the Anglophone countries. Rural children remain more likely to be overage (Lewin and Sabates, 2011).

Data from Bangladesh show that inequalities have also persisted in access to education with the poorest being excluded in greater proportions in all the zones of exclusion (Hossain and Zeitlyn, 2010). Most urban dwellers have more assets and are less likely to suffer food insecurity. However, the lack of public schools to service urban slums and the inability of the urban poor to afford private providers means that they are often completely excluded (Cameron, 2010).

In India, relatively poor access indicators for Muslims (Härmä, 2010), low castes, tribal groups (Sedwal and Kamat, 2008) and girls (Bandyopadhyay and Subrahmanian, 2008) show the powerful effects of social exclusion. Regional disparities in India also mean that some states are doing well while other lag behind (Lewin, 2011b) and even within states, remote areas or regions inhabited by minority groups may be poorly served by education infrastructure (Govinda and Bandyopadhyay, 2010a). Poorer households, and those from scheduled castes and tribes tend to enter school later. This reduces the chances of chidren reaching secondary school grades (Figure 11).

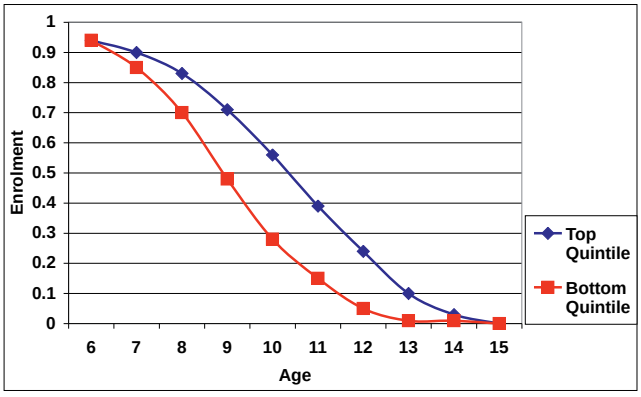


Figure 11 Chances of Entering Secondary School by Age of Entry in India

In Ghana 10% of the secondary schools produce nearly 80% of all science and engineering undergraduates. Less than 3% of those qualified for degree programmes originate from the lowest scoring 40% of all secondary schools. In South Africa data analysis shows that over 30% of a national sample of Grade 4 children are more than two years over age and that the older the child is the lower the score on numeracy and literacy tests (Taylor et al 2011). Overage children are more likely to be from poor households and receive social grants.

The messages from the research are clear. Though there has been progress in more participation, it falls far short of the gains that were anticipated. Universal access requires greater equity to close the gap between the poorest and other households.

Some indicators of access to education are not fit for purpose. Average Gross and Net Enrolment Rates (GERs and NERs) are poor indicators insensitive to changes in the composition of enrolments by age. GERs and NERs can increase or decrease when participation is improving and thus provide ambiguous signals to policy makers. Figure 12 shows how countries with different enrolment patterns by grade can have the same GERs and NERs.

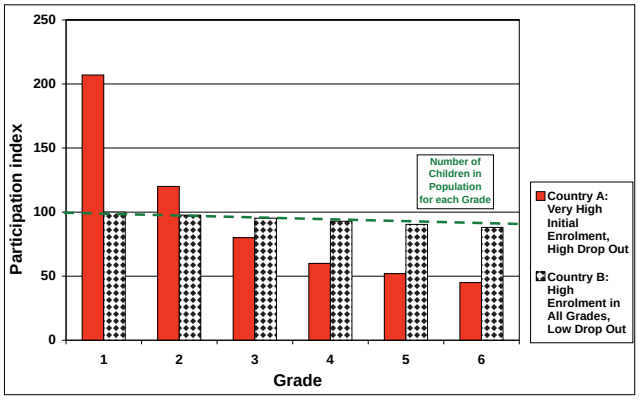


Figure 12 Two Patterns of Enrolment with the Same GERs and NERs

Country A has excess enrolment in Grade 1 with high attrition. Country B has more even enrolment across grades. They have the same GER. With minor assumptions about the composition of age in grade they could have the same NERs. Grade specific enrolment rates and completion rates are more useful than cycle length GERs and NERs (Lewin 2011c).

CREATE case study data and secondary analysis reveals vast differences in the conditions under which children learn. The poorest often have no access to clean water and sanitation, no learning materials, and poorly qualified teachers with large classes. The expanded vision of access depends on reducing the gap in the learning environment between the most and least favoured locations. Universal access and completion cannot be achieved without much more equitable distribution of opportunities to learn. Goals, targets and indicators have to include measures that capture who gets what and, in terms of educational access, how this is changing.

General Research Findings

Important observations arising from the research include, but are not limited to:

- **Increased enrolment rates have often been accompanied by increased drop out and greater number of over age children who are more likely to be at risk of failing to complete basic education.**

In many school systems where there has been a concerted effort to increase enrolment rates rapidly short term gains have masked very uneven patterns of enrolment across different grades, persistently high drop out, and increasing proportions of over age children. This is clearly the case in a number of Sub-Saharan African countries (Lewin and Sabates, 2011; Lewin, 2009; Somerset, 2007). It appears also to be the case in some northern states in India (Lewin, 2011b).

In some countries gross over enrolment in Grade 1, high drop out from middle grades, and slow improvements in enrolments and completion rates at Grade 5 and above have persisted for more than a decade. Unbalanced systems have settled to new equilibria that enrol more children but may fail to generate commensurate gains in completion rates. Evolution through characteristic patterns of enrolment types (Lewin, 2007a) has failed to occur in several low enrolment countries.

- **Most children out of school are drop outs, not those who never enrol.**

This is true in Bangladesh, India, and Ghana and, in slightly different ways, in South Africa (Ahmed et al., 2007; Govinda et al., 2007; Akyeampong et al., 2007; Motala et al., 2007). It is also true in many other low income countries (Lewin and Sabates, 2011). Exclusion from education is therefore more often a result of drop out than of initial and permanent exclusion. Most children below the age of 15 who are currently out of school have attended school but have not completed basic education. A 5% annual drop out rate (which is common in many countries) results in less than 75% of those who enrol reaching Grade 6 and less than 65% reaching Grade 9.

Dropout in Ghana

Most out of school children in Ghana have dropped out after enrolling for a period. In Mfantesman district in Southern Ghana, many children drop out leave school to work in the local fishing industry. They contribute to their household income. The times of day and year when children work don't fit well with the school timetables.

Drop out may be short term and coincide with specific activities such as helping to haul fishing nets in and process the catch when fishing boats return. Drop out can also be connected to particular events in the children's homes or at school such as family deaths or illnesses. Longer term drop out may be connected with seasonal patterns of work or migration. Some families in Mfantesman migrate to places along the coast for seasonal fishing work, and children may miss months of school (Ananga, 2011).

All these types of drop out need not be permanent, although many children do drop out of school permanently, especially if they get a job that earns them money. Some who fish earn more than their teachers!

Working on the beach can give good returns for a day's labour as these school age children know

The empty spaces in this classroom are testimony to drop out.

Drop out and lack of progression through to the end of the basic education cycle is the biggest challenge for universalising access to basic education in the countries in which CREATE has worked. Unless drop out is reduced there will always be generations of out of school children of school age replenished by new drop outs. Achieving the MDGs and EFA depends on much higher levels of retention, as well as efforts to include the minority who never enrol.

- **Children who never enrol are an important group since their right to access to education is completely compromised.**

In the north of Ghana more than 40% of children in some areas are not in school at the age of 8 and many enter school over age. In the south, it appears that less than 10% fail to enter school at all indicating the success of one aspect of EFA programmes (Rolleston, 2009). We have been able to identify never enrolled and non attending children in our research sites and we have insights into their characteristics from secondary data at national and regional level. For example, in the Northern Region, a fostered child has a chance of ever attending school 19% lower than a biological son or daughter, other things being equal (Rolleston, 2010).

However, in many cases there is no reliable national data that adequately captures many marginalised groups e.g. illegal internal and international migrants, children in socially excluded groups, some children with disability, illness, HIV and other socially exclusive conditions. These children can only be captured through community level enquiry, and commitment to identify and act to deliver rights to education. Often, but not always, those never attending are more likely to be children from poor households with larger numbers of young children, girls, children with disability, orphans, and are likely to be concentrated in some geographic areas.

Children who never enrol are in households where either:

i) they could have enrolled but did not, and where the best solution is to understand and act on the reasons for non enrolment or

ii) they are located where normal enrolment is not feasible and the best solutions may require novel approaches e.g. the School for Life in northern Ghana (Akyeampong, 2007; Arkoful, 2010).

Within households, there may be considerable variation between children in terms of enrolment. Rolleston (2011b) found that non-fostered children living in households where some fostered children lived had the greatest chance of being enrolled and worked the least number of hours compared to other groups of children.

Out of school children in the park, two of whom had never attended school

- **Drop Out is linked to direct and indirect costs, income shocks, opportunity costs, household and paid labour, migration, morbidity and household health events, orphanhood, marriage and pregnancy, disability, distance from school, safety, perceived lack of relevance, poor quality schooling, teacher absenteeism and poor learning environment.**

CREATE has identified many factors associated with drop out and push out (Hunt, 2008). The CREATE model predicts that drop out is more likely amongst those who enter school over age, who repeat grades, attend poorly, and are low achieving. Community and school data confirm these propositions (e.g. Sabates et al, 2010). Some school practices appear to encourage drop out. Uninspiring, uncomfortable, dangerous and violent schools put many children off (Sinha and Reddy, 2010; Williams, 2010). Corporal punishment remains widely used in Ghana and South Africa and can be a disincentive to return to school when absenteeism is punished (Alhassan and Adzahlie-Mensah, 2010). Bullying is associated with problems of sustained access to school (Dunne et al., 2010).

In Ethiopia temporary absence followed by repetition of a whole grade increases the numbers who are over age and who drop out (Orkin, 2011). Household welfare indicators are very strongly associated with enrolment in Ghana. A one unit increase in the log of household welfare is found to increase

a child's relative risk of being a drop out (zone 2 relative to zone 1) by 1.8 times. The same increase in welfare increases a child's relative risk of being in zone 4 relative to zone 1 by 2.6 times and increases the relative risk of being in zone 5 by 3.1 times. With regard to completing junior secondary school, the relative risk was increased by 4.1 times. The effects of occupation of the household head were even more significant. The children of public sector employees had four times less chance of dropping out than those of those not working, and nine times less chance of being excluded from secondary school (Rolleston, 2009b).

Similar effects are evident in other data sets (Sabates et al, 2010, Reddy, 2010). And more qualitative data yields insights about the dynamics of drop out and the inter relationships with practices at the community level (Laugharn, 2007; Cameron, 2010; Ananga, 2010).

- **"Silent exclusion" is important in all research sites. This refers to children nominally enrolled but learning little and at risk of drop out.**

Many learners are seriously over age (Lewin and Sabates, 2011; Rolleston, 2009; Ampiah, 2011; Motala, 2009; Govinda et al., 2011; Hossain, 2011) attend infrequently (Govinda and Bandyopadhyay, 2011; Rolleston et al., 2010), and score poorly on achievement tests (Taylor et al., 2010; Ampiah et al., 2011).

Silent exclusion is correlated strongly with poverty and poor health (Hossain and Zeitlyn, 2010). Increased physical access has resulted in large numbers failing to reach minimum learning goals and many being two or more years below norms expected levels of performance (Gilmour and Soudien, 2009, Taylor et al., 2010; Ampiah et al., 2011).

A working definition of silent exclusion identifies children at risk of dropping out as those who are attending less than 90% of timetabled time, are over age by two years of more, have repeated more than one year of school and who are performing two or more grades below the norm in language and mathematics. Using these indicators about 20% of primary school children in the Bangladesh sample were silently excluded and at risk of drop out (Hossain and Zeitlyn, 2010:7). These children have physical access but not the kind of access that allows them to learn.

- **Over-age entry to primary school and delayed progression are substantial impediments to the achievement of EFA in Ghana, India and Bangladesh, and remain significant in South Africa despite the formal commitment to automatic promotion.**

If children do not enrol by the age of ten it is unlikely that they ever will (see Figure 8) (Lewin 2007a; Akyeampong et al., 2007; Rolleston et al., 2011). Late entry arises from several factors including stunting, household labour, under valuing schooling, safety and lack of awareness of birthdates. The standard deviation of age in grade usually increases with grade (Lewin, 2009), except where there are strong selection effects at higher levels which result in over age children being excluded. Entering school late and being over-age increases the chances of drop out (Sabates et al, 2010:15).

Girls appear particularly vulnerable to drop out if they are over-age in communities where early marriage is common (Sabates et al., 2010; Taylor et al., 2010). In much, but not all, of Sub-Saharan Africa the preponderance of boys at secondary level is due mostly to the differential persistence to older ages of boys. Where completion rates are lowest, over-age enrolment is greatest.

There is some evidence that gains in enrolment rates have been achieved at the cost of greater proportions of over-age children enrolled. Thus improvement in the wealth gradient for being in school for the poorest children was accompanied by an increase in the likelihood of being over age in school, more so in Anglophone than in Francophone countries.

In two Anglophone countries, Malawi and Nigeria, the probability of being over age in school by three or more years has increased over the last decade. In Tanzania the situation is different, since all children have a lower probability of being over age, but the richest children gained much more rapidly. In Kenya, Uganda and Zambia the situation remained almost unchanged.

The wealth gradient for children who are over age by three or more years has become steeper in Malawi, Nigeria and Tanzania and remained unchanged in Kenya, Uganda and Zambia. It should have fallen in all cases (Lewin and Sabates, 2011). If this were transient it might not be surprising. However in

some countries it appears to be a persistent effect. No high enrolment and high completion rate education system has wide age in grade dispersion.

Pre-school can give a head start and encourage enrolment at the right age. In China most preschools are private and charge and thus exclude the poorest

- **Poor attendance of children and teachers results in the loss of large amounts of learning time, and is often associated with low achievement and repetition leading to over age enrolment.**

Aggregate enrolment rate indicators conceal low levels of daily attendance, which can lead to poor achievement and drop out. In some systems, and in some schools in our case studies, child attendance may average less than 60% on a given day (Ampiah et al., 2011; Bandyopadhyay, Das and Zeitlyn, 2011). When this is coupled with irregular teacher attendance this may result in the loss of more than half of all learning time. Irregular teacher attendance was a problem in many places (Bandyopadhyay, Umabati and Zeitlyn, 2011; Alhassan and Adzahlie-Mensah, 2010). In Sri Lanka where enrolment rates are high, poor attendance and low achievement are associated more strongly with school and community effects rather than with household effects (Little, Indika, Rolleston, 2011).

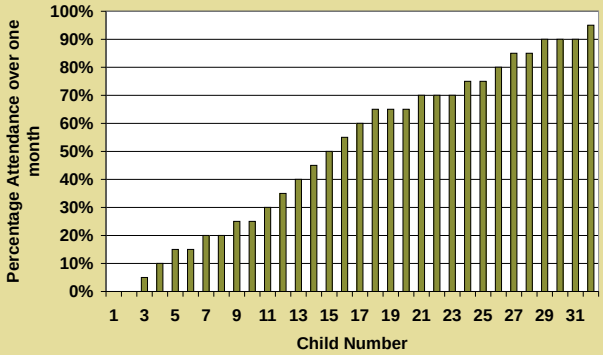
Indicators of attendance have to be included in measures of progress towards the MDGs and EFA. Reasons for poor attendance are varied and include sickness, caring for siblings and relatives, seasonality, local opportunity costs for cash income, costs, transport issues, school discipline, and low achievement (Govinda and Bandyopadhyay, 2010).

School feeding appears to increase attendance in some cases but can have substantial costs. Poor attendance is often a a pre-cursor to drop out (Sabates et al, 2010) and happens in characteristic patterns which may be temporary or permanent and may be sporadic, linked to singular events, or long term and persistent, and may be associated with ambitions to drop in or to remain dropped out (Ananga, 2010). These different conditions have different causalities and link to different possible interventions.

Daily attendance is a problem in many rural schools in Ghana

On average as many as 40% of children may not be present on a particular day. The attendance register over a month in this school shows that more than two thirds are absent for more than 30% of the teaching time available. This is the equivalent of losing a day and a half a week or more. And this takes no account of teacher absences. Learning is compromised by such a large loss of time on task and levels of achievement correlate with absenteeism.

A class in a rural school in Ghana



Daily attendance register for a month

- **Poor health and nutrition are related to late enrolment, low attendance, repetition, low achievement, and subsequent drop out.**

CREATE has developed a comprehensive state of the art review of evidence on the impact of health and nutrition on educational access, participation and achievement (Pridmore, 2007) and has extended this with insights from fieldwork which has included measuring body mass Indices in some sites, and through analysis of secondary data (e.g. Orkin, 2011; Sabates and Hernandez, 2011; Buxton, 2011). Poor health and nutrition clearly contribute to educational exclusion across the zones of exclusion (Hossain and Zeitlyn, 2011). Health shocks from (and before) birth may have enduring consequences – stunting is irreversible, cognitive damage from nutritional deficiencies may not be recoverable (Sood, 2010). In rural Sri Lanka poor health is associated with poor attendance (Little, Indika, Rolleston, 2011).

School is not for smoking – an underage smoker outside a village school

CREATE has collaborated with the "Young Lives" project funded by DFID. One result is Orkin's work (2011) which shows how important it is to understand patterns of parental and child morbidity and how these interact with attendance and progression. When schools require the repetition of a whole grade after a period of absence, illness increases the likelihood that children become over age. The size of the illness effect on become over age was similar to the size of effect of being stunted in a large sample and has as much negative impact on access as being an orphan. Orkin (2011), Ananga (2011) and Ampiah and Adu Yeboah (2011) highlight the role of children in caring for sick relatives and the effects that these responsibilities can have on educational access.

- **Disability is linked to higher probabilities of exclusion.**

Croft (2010) has reviewed definitions and approaches to disability, and identified key issues needed to achieve greater inclusion of children and young people in learning and this work is complemented by Gifford-Lindsay's study (2008).

Pedagogical approaches suited to circumstance and disability are critical to effective practice and depend on assumptions that differ across cultures. Widely the identification of disability is uneven and imprecise resulting in uncertain but real barriers to access to those with disability. Specialised provision for recognised disabilities – speech, hearing, sight, mobility – appear often to depend on support from non state providers. Policy on inclusion and mainstreaming those with disability in normal schools can be inconsistent and contradictory.

- **Expanding access to secondary schooling is critical to achieving universal access to primary schools.**

Access to secondary schooling is becoming a greater determinant of life chances than completion of primary schooling in most poor countries. Those who progress to post primary education are much more likely to come from richer households and be urban rather than rural. Unless transition rates to lower secondary are high, demand to complete primary schooling will soften. Participation at secondary level also needs to grow fast enough to ensure the supply of new primary teachers needed to support universal access to primary school.

There are many other reasons to manage the expansion of secondary schooling, not least the critical importance to economic growth of ensuring that enough secondary educated graduates reach the labour market (Lewin, 2007b). Data from Kenya indicate how access to secondary schooling favours richer households and existing elites (Oketch and Somerset, 2010; Ohba, 2010). In Ghana 20% of secondary schools provide 80% of university entrants (Djangmah, 2011). In India costs remain a disincentive to enrol above Grade 8 (Siddhu, 2010; Lewin, 2011b). Expanded access requires curriculum reform to reflect the characteristics, aspirations and needs of new generations of students less selected than in the past. It will also need reforms in financing.

Secondary school girls in Sri Lanka

Expanding Access to Secondary Schools

As more and more children reach the end of primary school, demand for secondary school has been increasing. Universal access to primary school has been complemented by the promise of universal access to secondary school. Who goes to which secondary school has become a critical question for children, parents, and policymakers. Secondary schooling determines life futures and is for many the only pathway from poverty to secure employment in the modern sector.

More secondary schooling is associated with lower fertility and infant mortality, lower rates of HIV infection, greater well being and life expectancy, and higher household incomes. Yet access to secondary schooling remains strongly associated with poverty and rationed by price, is often gendered, and can be of very uneven quality and relevance. Where secondary school participation has grown more slowly than that at primary, transition rates may have fallen and reduced the incentive to complete primary schooling. Higher direct and indirect costs than at primary school mean that secondary schooling is often unaffordable to those in the lowest three quintiles of household income in poor countries. But without universal completion of lower secondary many will have their right to a full basic education truncated.

Secondary school under a tree in Malawi

- **School quality and school processes are inseparable from educational access and outcomes and are embedded in CREATE's expanded vision of access. Access requires learning that has utility using pedagogies that are effective and fit for purpose which result in achievement commensurate with grade level.**

Several research outputs address quality and achievement issues. Govinda and Bandyopadhyay (2011) argue that 'the backward linkage between school quality and exclusion from schooling' needs to be further examined, insisting, along with other CREATE researchers (e.g. Reddy and Sinha, 2010; Alhassan and Adzahlie-Mensah, 2010) that poor quality and unfriendly schools are putting children and families off and pushing them out of education. Alexander (2008) explores how educational quality in the classroom is conceived, indicated and measured and how better pedagogies might be developed in the future.

Pedagogy is often the missing ingredient in EFA discussions of quality which foreground indicators and outcomes, and largely ignore process. Indicators and measures are often confused though they are not the same things, and quality has to be judged in ways that are comprehensive, guard against evidential basis, have validity and reliability, give insight into impact, are manageable and appropriate to the context of use.

This links to other critiques of indicators of EFA progress (Lewin 2011d) that invite careful consideration of who needs to know what to improve quality. Other research insights relevant to quality include an analysis of bullying and its consequences (Dunne et al, 2010), an exploration of school based support for vulnerable children (Williams, 2010); insights into language policy and practice in South Africa (Lafon, 2009), and problems with age in grade progression that relate in part to the quality of learning and teaching. Hossain (2010), Taylor et al. (2010), and Rolleston et al. (2011) show how over age learners perform worse than those in the correct age for their grade and note that there is little or no pedagogic recognition of age grade slippage and the need for special support for over age learners.

Alhassan and Adzahlie-Mensah (2010) provide insights into some practices amongst teachers that seem likely to undermine quality learning and diminish access. These include absenteeism and corporal punishment as well as poor pedagogic practices that place most responsibility for poor performance on children.

Pedagogy needs to be suited to large classes – in this case over 90 children

A small school in Nepal with one teacher and one class with children from 4 years to 14 years

- **Effective Small schools and Multi-grade Teaching and Learning are essential to reach those where school size is small.**

Over 80% of primary schools in rural India have three or less teachers, but cover enrolment across five grades (Blum and Diwan, 2007; Little, 2008a). Small schools are common and necessary at primary level in low population density areas. Unless multi-grade pedagogies are used, as in Activity Based Learning (ABL) in Tamilnadu (Kumar, 2010), learning time will be lost.

Expanded access to lower secondary schooling creates an additional challenge for the design and operation of small secondary schools at sustainable costs. Though boarding is an option it is not one that is likely to be cost efficient on a large scale, unless organised in the way it is in rural China (Lewin, and Wang, 2011). Multi-grade schools require investment in suitable core curriculum, appropriate learning materials, and the development and support of multi-grade pedagogies (Little, 2008b). There is no reason why they should be more expensive in operation than monograde once the start up costs have been covered.

Activity based Learning, India and Bangladesh

Innovations in pedagogy can help encourage more effective learning. Activity Based Learning in Tamilnadu has developed from the experimental schools in Rishi Valley in Andhra Pradesh. The pedagogy is based on the use of learning ladders that define tasks linked to learning resources. Peer learning is encouraged and children work together in small groups. Learners progress through tasks at different speeds depending on their capabilities. Teachers facilitate and monitor learning. Achievement is registered on charts on display in the classroom so every child can see how they are progressing and be rewarded in moving on to the next level. Teachers are supported by advisory teachers who rotate between schools to give advice and in-service training. 35,000 schools in Tamilnadu have now adopted this pedagogy.

BRAC in Bangladesh organises over 30,000 schools which follow a well established pattern of learning and teaching. Each school admits about 30 children over a three year cycle and the class group progress together. Teachers are usually local residents with some secondary schooling who are supported and trained by BRAC field staff who meet regularly with them. Each BRAC classroom is equipped with a standard set of learning materials and writing equipment. Children's work is displayed to encourage participation and celebrate progress.

Activity Based Learning in Tamilnadu, India

A BRAC School in Bangladesh

- **Teacher supply and deployment can be insufficient, unbalanced, inequitable and inefficient.**

Full time pre-career residential training of teachers is expensive. Case study sites provide evidence of uneven posting of teachers, teacher absenteeism, low time on task, and disinterested and unimaginative pedagogy (Govinda et al., 2010; Bandyopadhyay, Umabati and Zeitlyn, 2011; Alhassan and Adzahlie-Mensah, 2010; Akyeampong, 2011). Pupil teacher ratios vary widely across and within case study districts from below 10:1 to over 100:1 with consequences for learning and teaching, and acute shortages of teachers persist in some areas, and coexist with surpluses in others. More efficient methods of training and deployment are needed to support EFA at sustainable costs (Bandyopadhyay, Umabati and Zeitlyn, 2011).

Circumstances differ widely between countries and regions and modalities for training new teachers are also greatly varied. Teachers' salaries relative to local incomes cover a wide range of ratios and influence demand for initial training and subsequent motivation. As communication infrastructure has improved it appears to have become more common in some areas for teachers to live off site and commute to rural schools from small towns and urban areas. This may dilute relationships between teachers and communities, especially where teachers are drawn from different castes and classes than the children they teach (Bandyopadhyay, Umabati and Zeitlyn, 2011).

- **Migration, seasonality and nomadic livelihoods generate major challenges for universalising access.**

Migration (international, internal, related to urbanisation and internal displacement) is common in sub-Saharan Africa and South Asia and is driven by a range of different motivations that include asylum seeking from oppression and exclusion, labour migration, and family reunification. Children may move to be fostered within households and fostered children migrate to earn money to secure a good marriage (Rolleston, 2011b), they may be accompanied by parents or leave parents behind (Buckland, 2011; Shindler, 2010), some children are left behind by migrating parents and may be cared for by relatives or placed in boarding schools (Lewin, and Wang, 2011).

Information on migrants is very uneven and hampered by the clandestine nature of some migration, and the risks of persecution associated with asylum seekers fleeing violence. Seasonality is often associated with temporary migration and this can disrupt schooling (Ananga, 2010; Hadley, 2010).

Migrant labour of young women (kayaye) is common in Ghana. Those involved often have interrupted schooling

Nomadic communities are especially challenged by conventional school systems predicated on sedentary livelihoods and a range of different strategies can be adopted to deliver basic education for them (Sharma, 2011).

Hadley (2010) notes that agricultural seasonality is rarely linked to discussion of education policy in Sub-Saharan Africa. Yet it is clear that income poverty and labour demand vary with the agricultural seasons and have implications for household income, child labour, gender inequalities, migration, malnutrition, anaemia and malaria. These in turn have implications in each of CREATE's zones of exclusion addressing initial enrolment, school attendance, dropout, repetition and cognitive development and learning.

Nomadic communities in north India are mobile and children cannot attend normal schools

Poorly planned mass education policies can unintentionally damage rural livelihoods by forcing children and households to decide between education and work. Schools run by BRAC operate a seasonally-adjusted school calendar designed through consultation with parents and the wider community. State-led reforms of the school schedule or fee due-dates in Brazil, Colombia and the Gambia have proved successful in boosting enrolments and lowering drop-out rates.

- **Non-state providers make contributions to educational access but remain much less important than public authorities**

There are very diverse patterns of provision supported by NGOs (Rose, 2007a, b). At primary level in Ghana and South Africa NGO capacity is a small proportion of total provision. In South Africa non-state providers only account for about 5% of enrolments and most of these are in high cost private schools (Lewin and Sayed, 2005; Motala, 2008).

NGOs come in many forms. Non-profit varieties include faith based, philanthropic, community supported, and corporate forms (Rose, 2007b). BRAC is a very large scale not for profit provider with a unique pedagogic programme which provides access to education in rural Bangladesh, alongside a range other NGOs (Ahmed, 2007; Sabur et al., 2009). About 40% of children in Bangladesh go to schools managed by non-state education providers, although only 15% are in schools not funded by the state (Sabur and Ahmed, 2010:8).

Key issues are whether different NGOs should be encouraged to deliver services or complement those provided by the state, and whether the state or NGOs should be the provider of last resort. Large-scale public subsidy of such NGOs is unlikely to be the strategy of choice.

- **Private for profit schools have provided high cost, high quality schooling to a small minority of children. The limits to growth of such schools are determined by costs and household income.**

Unsubsidised private schools adopting standards and salaries similar to government primary schools are largely unaffordable in sub-Saharan Africa for households below the second quintile of income. Households below the first quintile are likely to be excluded from secondary schooling (Lewin, 2007e). Costs are lower in South Asia but not so low that the poorest can afford private schooling.

Reading in Bangladesh

Empirical evidence from India shows conclusively that the poorest cannot access low price private schools in rural areas and that the development of such schools for richer parents has resulted in an almost complete separation of the schooling of richer children from that of the poorest (Härmä, 2010; Siddhu, 2011). The poorest, remotest areas in need of more education facilities are often not served by private providers, while wealthier areas with already adequate state provision have most private providers (Govinda and Bandyopadhyay, 2010a). In Ghana low price private schools also do not generate access for the poorest (Akaguri, 2010).

In both Ghana and India, private school teachers may be paid below minimum wage levels and a fraction of the salary of government teachers – as little as one twentieth in some parts of India. The conclusion is that private providers (i.e. unsubsidised, for profit) will only contribute on the margin to achieving EFA and the MDGs. Private providers will not be the provider of last resort to the poor and will predominantly capture differentiated demand from failing public providers amongst households with relatively higher income (Lewin, 2007e).

A low price private school in action in Ghana

Low Price Private Schools

In most poor countries private schools have a long history of providing high quality and high cost education to elites. Economic liberalisation has encouraged the growth of low fee private schools which may be attended by those from households from lower quintiles of income.

Such schools are rarely affordable for the poorest. Teachers in such schools are often paid a fraction of the salary of a government teacher, and are much less likely to be qualified. They are often located in temporary structures and buildings designed for other purposes. Some are able to produce better attendance and achievement than in government schools as a result of paying teachers by the lesson or by the day.

Low price private schools run for profit are unlikely to be the providers of last resort to the most vulnerable communities. Their growth may well be a signal of state failure to provide basic services. No richer countries have adopted private fee paying primary schooling to reach out to the relatively poor.

Low price private schooling in India

- **Physical access and supply side problems – insufficient schools, too few qualified teachers, poor quality learning space – remain a serious constraint on realising equitable access to basic education for all.**

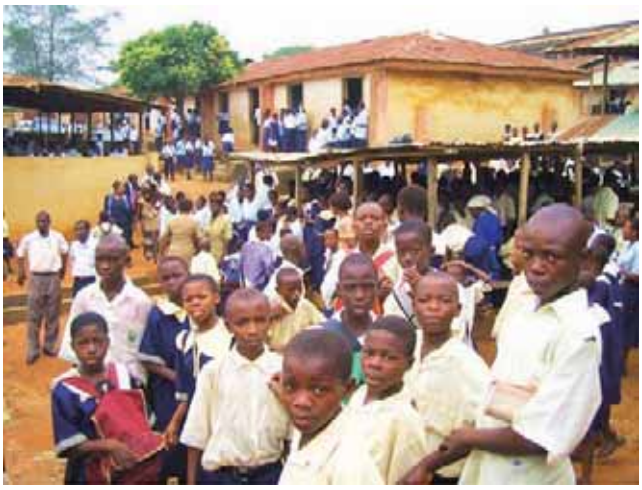
Our case studies identify schools which have no clean water or sanitation, no electricity, poor physical conditions which compromise learning, too few classrooms, and over size classes sometimes with over 100 children to a room or taught outside (Govinda and Bandyopadhyay, 2011; Williams, 2010). There are also regions in which there are simply not enough schools within reach of populations (Siddhu, 2010; Govinda and Bandyopadhyay, 2011; Cameron, 2010).

It is a fundamental criterion for meaningful access that physical facilities meet basic standards that should include at minimum clean water, sanitation, safe learning space with light and ventilation and no environmental hazards, location within reasonable travel distance, appropriate furniture and equipment, adequate supply of learning materials including books, blackboards and essential teaching aids, sufficient classrooms and teachers to organise classes with no more than 40 children, adequate local accommodation for teachers, and access to modern communication system.

Thus, school building programmes linked to school mapping remain essential to ensure access to adequate school space in accessible locations. Investment is needed in learning materials and curriculum fit for purpose on a scale sufficient to meet maximum needs for effective learning.

- **Demand side problems – e.g. rising opportunity costs, lack of perceived relevance and early marriage – are growing in importance as enrolment rates increase and basic education is extended to include Grades 9 or 10.**

CREATE research links drop out with poverty (Sabates et al, 2010), opportunity costs in local labour markets (Ananga, 2011), lack of perceived benefits, and lack of relevance, and poor school quality (Govinda and Bandyopadhyay, 2011). These reasons are visible especially amongst older children and their parents who question the value of completing a full cycle of basic education for some children and who have greater pressures on them to marry or contribute to the household economy.



A rural secondary school in Nigeria

EFA is unachievable without understanding these problems. Effective demand problems are evident in upper primary and lower secondary, and amongst older children (Ananga, 2011).

- **Costs and financing of primary schools remain problematic and the non-tuition fee costs to households of primary schooling are becoming far more important for exclusion than tuition fees.**

Bangladesh (Hossain and Zeitlyn, 2010), India (Govinda, 2011) and Ghana (Akyeampong, 2011) have tuition fee free primary schooling, as does South Africa for schools in the poorest three quintiles (Motala et al., 2007). However it is clear that informal and additional fees are charged widely for services, and other contributions are invited or expected. Other costs to households can be high (transport, uniforms, learning materials, food) (Akaguri, 2010).

Capitation has been introduced in some countries (e.g. Ghana) with the expectation that this income to schools will replace foregone fee income after tuition fees are abolished (Akyeampong, 2011). It is not clear that capitation has been sufficient. In the case of Ghana subsidies have been made available to all schools with the expectation of fee free schooling but this has in fact subsidised the relatively rich more than the relatively poor. Those from richer households participate more and longer.

Unsafe buildings and poor learning environments

Too many schools still have unsafe buildings with no basic services Overcrowded classrooms with inadequate learning conditions remain common.

An unsafe school building in a mountain village

A dangerous school building

A poor quality learning environment

A low quality private school classroom in India

- **Secondary school financing remains central to problems of expanded access through to the end of lower secondary school. Mass secondary education in Sub-Saharan Africa is unattainable at current levels of cost and teacher productivity for reasons of demography, income distribution, and teacher labour costs.**

No country with a public cost per student ratio of secondary to primary of more than 2:1 is likely to provide mass access to secondary schooling. No household much beyond the 20th percentile of household income will be able to afford unsubsidised private secondary schooling in much of Sub-Saharan Africa. Nor will such households be able to afford public secondary schooling as currently configured.

In South Asia affordability tends to be greater because the labour markets contain more educated members willing and able to teach for lower relative wages. Nevertheless, wholly unsubsidised schooling is likely to be unaffordable below the third quintile of household income at primary and the second at secondary (Lewin, 2011b). Studies of access to secondary school (Siddhu, 2010; Ohba, 2009) indicate how costs constrain choice, exclude many, and condition expanded access.

- **The sustainability of EFA depends on effective long term planning that recognises demographic certainties, financial realities, lead times for expanded service delivery (teacher training and deployment, classroom construction), and forward liabilities, especially those related to expanded secondary schooling**

"Big push" programmes rarely generate sustained gains unless they are accompanied by long-term planning and resource allocation. They risk degraded quality and greater levels of inequality. They may also be accompanied by failing demand related to falling quality and a flow of public costs that will becomes unsustainable without very high levels of external dependence.

More balanced investment is needed between educational levels (primary, secondary, higher) than normative benchmarks for investment in primary suggest. EFA will not be achieved, and nor will gender equity at primary and secondary school, with 60% or more of resources allocated to the primary cycle alone. Gender equity requires higher completion rates at primary and greater participation at secondary of both girls and boys. This will need reforms that result in more affordable secondary schooling (Lewin 2007d, 2011c).

Findings from Community and School Studies

The programmes of empirical research in communities and schools are summarised selectively below. These complement outputs from the other research strands within CREATE, and the work of postgraduate researchers. Each country thus has a portfolio of research outputs of which the Community and School Studies reported below are only part.

In Bangladesh, India, Ghana and South Africa, empirical work has been undertaken in selected communities and schools to explore and understand in more detail access to education. **Ten generic instruments** were developed which were modified for use at each fieldwork site. **Country Analytic Reviews** informed the research (Ahmed et al., 2007; Govinda et al., 2007; Akyeampong et al., 2007; and Motala et al., 2007). These substantial 100 page reports provide the context and detailed commentary that underpins the ComSS. Various fieldwork reports have been archived.

Short summaries of some of the main issues and findings are encapsulated below. **Country Research Summaries** are available on the website and give more detail of findings.

Bangladesh: Research Overview, BRAC-IED

In Bangladesh studies of communities and schools (ComSS) in six locations, one from each administrative division in Bangladesh, were conducted over a three year period with two rounds of data collected in 2007 and 2009 from households and schools in order to gain insights into the dynamics of participation and exclusion of children in schooling. The study covered 6,696 households with 9,045 children aged 4-15 years from 35 school catchment areas (an additional sample was developed of 500 slum households in Dhaka).

The survey was designed to explore access to basic education in these districts using CREATE's conceptual model of 'zones of exclusion'. A baseline survey was conducted in 2007 and after two years, in 2009, a follow up survey was done with the same households. The survey identified children who had been excluded from education in both 2007 and 2009 who are in 'zone 1' – never enrolled. It also identified children who dropped out from primary school (zone 2), and those who were enrolled in 2009 but not in 2007. Those enrolled but attending irregularly, repeating years of schooling and learning little (zone 3) were also identified as were those not transitioning to lower secondary level after completing primary schooling (zone 4).

Sampling was driven from all households from within each district, and children were tracked back into schools in the districts selected. It was not possible to follow children who attended schools outside the case study districts.

Learning in a BRAC school

Some Findings

The data confirm that non-enrolment of school-age children (exclusion zone 1) remains a significant problem. Official national statistics indicate a non-enrolment rate of around 10% within the primary age group. The data from the sites was consistent with this, though there were difficulties in establishing non-enrolment rates definitively in specific communities. Some apparently out of school children migrated, others were not declared by households, while others were temporarily out of school. Children who did not enrol at all were more likely to be disabled and less likely to play normally than children in school and those who dropped out. These excluded children were from poorer families, both economically and educationally, than families of children who dropped out (Ahmed and Hossain, 2010).

The analysis highlights the extent to which dropout is a critical problem both at primary and secondary level. Dropout is associated with poverty, reflected

in the food-security status of families, parental education and household income. The capacity of poor households to support and guide their children through schooling is limited and linked to drop out. Issues around how education is delivered (school-related factors) are also crucial.

Schools serving children from poor households fail to compensate or remedy disadvantage associated with poverty and themselves have few resources to do so. Stipend income is directed to households rather than schools which have minimal non-salary budgets.

Those who dropped out were on average older, came from lower income families, had parents with lower levels of education, had more household responsibilities, were in poor health, suffered from malnutrition and received significantly less support from parents for their school work (Sabates, Hossain et al, 2010).

Poverty, low levels of parental education and unskilled parental occupations are associated with late entry into education and repetition of years of schooling. Children who start school late and repeated school grades become overage and the more over age children were, the more likely they were to drop out (Hossain, 2010).

Around half of the children who dropped out were participating in rural-urban migration, as a livelihood strategy for families. Child migration on this scale has important implications for policy and strategy regarding access, continuation in school, completion of the primary stage and transition into secondary school (Ahmed and Hossain, 2010).

The category of silent exclusion or zone 3 is difficult to quantify with precision. The data indicate that this includes over age, repeaters, poor attenders and low achievers. At a minimum it comprises 20% of primary students depending on the definition used. Silent exclusion is also associated with the poor who cannot afford school materials or pay for private tuition (Hossain and Zeitlyn, 2010; Ahmed and Hossain, 2010).

About 24% of the children who completed Grade 5 in the sample did not enrol in Grade 6, the first year of the secondary stage. This number, however, underestimated the zone 4 (transition to secondary) problem. Drop out in Grade 5 before transition was about a quarter of all drop out from Grades 1 to 5 with substantial numbers leaving before completion This implies that the transition rate in the sample is even lower than it appears to be. Slightly more than half of all children successfully transit into secondary school (Ahmed and Hossain, 2010).

About 60% of the not enrolled children were in the 6-8 years age group. Some may enrol later but their chances reduce rapidly as their age increases. The culture of enrolling children in school consistently at age six is not embedded in the sample communities. The absence of birth registration and birth records also encourages a casual approach to the age for starting school. The consequences of late enrolment are manifested in dropout in later years, and high opportunity costs for school attendance as older children are seen as ready for paid or unpaid work. For girls, there is also concern among parents about safety and security of older girls walking to school and family and community pressure to marry (Hossain, 2010; Ahmed and Hossain, 2010).

Across the board there were clear relationships between non-enrolment, dropout, non-transition and socio-economic status, represented by the food-security status of families, household income, and parent's education, as might be expected. Two-thirds of the never-enrolled children were from families "always in food deficit" (ultra-poor) and "sometimes in food deficit" (poor) in respect of staple grains supply. In the case of dropouts, 55% of the children came from households with food-deficit, though 45% of the population were in this category (Hossain and Zeitlyn, 2010).

A large proportion of school age children suffer from health problems (about a quarter of children of school age, in and out of schools, sampled were sick in the previous 30 days). When ill health or episodes of sickness are combined with other disadvantages of children prone to exclusion, their chances of effective participation in education are further diminished. Their quality of educational experience ultimately suffers as children with health problems often enrol in school late, have high rates of absenteeism, lower cognitive development and increased risk of drop out (Hossain and Zeitlyn, 2010; Ahmed and Hossain, 2010).

Household perception of reasons for non enrolment and dropout suggested supply-side constraints

which included: schools being located too far from homes, and school education being perceived as of little value to children. This varies by school and community and perceptions and preferences change. There is some evidence of a drift away from government schools to registered non-government schools and madrasas (Ahmed et al 2010). This may reflect dissatisfaction with standards and the quality of teaching.

Some Policy Messages

- Absence of birth registration leads to major uncertainties in statistics regarding enrolment, completion and dropout necessary for proper planning and management of the system. Measures should be taken through local government agencies to enforce birth registration policies. Retro-active birth registration of 5-6 year olds should be undertaken as part of the government plan to bring all 6-year old children into school. All children should be located and encouraged to attend schools from the age of 6 years by local authorities who should be obliged to monitor and report on their actions and outcomes.

- Child migration, with or without other household members, has been identified as an important dimension of school dropout. Its nature and prevalence needs further research to understand the scale of the phenomenon, the reasons for migration, and the activities of migrants, and the access to school of migrant children. There is a very limited amount of research on child migration in Bangladesh (exceptions are Giani, 2007 and Heissler, 2008). Migration is likely to increase with urbanisation and currently there is no systematic policy on how to deliver educational services to migrant children.

- The peaking of dropout in Grade 5 and reduced primary completion associated with the newly introduced public examinations which encourage some schools not to enter low achieving candidates need serious attention. The supply of books and school materials needs to be improved so that all children have books, and essential school equipment, since lack of these is associated with drop out and poor performance.

- Silent exclusion, where children attend but learn little, is clearly a serious problem affecting a large proportion of children. Agreement is needed on minimum thresholds for silent exclusion e.g. less than 90% attendance, more than two years over age, achievement two years or more below the norm for the grade. More research is needed to detail and sensitise schools and teachers to the extent to which children are failing to learn and the reasons why. More school based work is needed to investigate further the processes and practices of silent exclusion in different locations. Responses to address such exclusion have to be based on school and community-based actions informed by evidence on its prevalence and persistence. Upazila-based planning and management must be sensitised to the issues.

- Clear relationships have been found between exclusion from education and socio-economic variables, represented by the food-security status of families, household income, and parent's education. Stipends to poor students (conditional cash transfer) in primary schools linked to the second Primary Education Development Programme (PEDP II) remain a government strategy to promote equity in educational access. The supply-side constraints perceived by parents, and poor targeting of stipends which mean that the poorest may not receive support, suggest that the funds spent for stipends could be better used in providing essential quality-enhancing inputs in schools, including school meals. This question needs to be examined rigorously, especially because of the major budget implications of choices made (Hossain and Zeitlyn, 2010).

- The rapidly growing population of poor slum dwellers have been under-served by both governments and NGOs. There is a subset of households which are extremely poor (roughly, the poorest quintile) and for which even low private education costs are prohibitive. The rapidly growing number of poor slum dwellers have been under-served by both governments and NGOs (Cameron, 2011). In areas of high urban migration which are often illegally settled, public provision of schools is largely lacking. Expanding services for the urban poor, including subsidies and other support is essential to maintain high primary enrolments and to reach the UPE goal (Cameron, 2010).

- Given their record in providing complementary and alternative educational opportunities, NGOs

should be supported to target educationally disadvantaged areas and groups, and to design and offer inclusive and responsive approaches to under-served populations within the framework of area-based and coordinated programmes.

- Substantially greater public resources should be committed within the framework of the sixth five-year plan and the new education policy in order to assure minimum necessary levels of quality with equity. Bangladesh allocates a smaller proportion of GDP to education than most low income countries and this constrains progress towards universal access.

Ghana: Research Overview, University of Cape Coast

CREATE conducted a longitudinal survey of 36 schools and 1,049 households in two deprived districts in Ghana in order to examine issues of access and exclusion. Over 2,500 children were tracked and their attendance and achievement monitored. The Community and Schools Study (ComSS) took place in Mfantesman and Savelugu-Nanton over four years. Alongside surveys, child tracking qualitative studies of the experiences of drop-outs and never-enrollers in the two districts were undertaken. The two districts chosen are typical of areas in the south and north of the country and allow for some comparisons. A number of complementary studies were conducted using secondary data, addressing issues of schooling, health and nutrition, costs and finance, national trends in exclusion and equity; and the character and development of private schooling. Data from national-level surveys, administrative sources, the ComSS and CREATE qualitative studies are the principal sources of evidence employed in the CREATE research.

Some Findings

Initial access to basic education in Ghana has expanded steadily since the 1980s though progress stalled for a period in the late 1990s and early 2000s. Recently the introduction of capitation and tuition free schooling has resulted in an accelerated growth in enrolments in Grade 1. However, as many as 10% of children remain excluded nationally. For them, the costs associated with schooling, poverty,

A rural school in Ghana

livelihoods in farming, location in the north and in rural areas, and fosterage and migration are among the factors that inhibit access along with low perceived benefits and lack of relevance (Akaguri, 2010; Rolleston, 2009; Ananga, 2009; Rolleston et al., 2010; Rolleston, 2011).

Over the last decade enrolment rates have increased but higher levels of participation appear to have been accompanied by increased numbers of over age students and little reduction in drop out. Completion rates have remained largely unchanged. The introduction of the capitation grant did have an impact on enrolments but this effect was one-off. Higher enrolment amongst the most marginalised groups almost certainly requires more targeted interventions to address specific exclusion issues directly. Those who remain excluded include those for whom school remains difficult to access physically due to distance or disability, those for whom indirect costs such as food, materials and transportation are prohibitive, especially at junior high school (JHS) and above, and those whose labour remains essential for family livelihoods.

In the north, less progress has been made in relation to rates of primary drop-out and completion than in the south. Progression to JHS also remains much lower in the north as a proportion of the age group. Drop-out is associated with poor attendance and performance, caregiver illiteracy, low income and high schooling costs, household composition and children's work. It is associated with complex patterns of temporary periodic absence as well as permanent cessation of schooling (Ananga, 2011). Progression depends particularly strongly on household livelihoods and welfare beyond the basic phase, although the vast majority of those who reach primary completion do progress to JHS except in the north. In some parts of Ghana almost half of all children fail to make the transition to JHS and many more fail to complete JHS, the end of the basic education cycle.

An important finding of CREATE is the very high prevalence of over age children, who in many poor rural areas constitute the majority of children in school. Absence from school is high amongst children from low income households and achievement is relatively low which leads to age in grade slippage More than 40% of children in Grade 1 are eight years old or more in a national sample. In the ComSS most children are over age. Late enrolment which is compounded by repetition and overage progression is thus very prevalent in Ghana. It is closely associated with silent exclusion indicated by poor attendance and low achievement.

One important explanation of over-age entry to Grade 1 is growth stunting due to poor nutrition which can lead to late entry because children are judged to be "too small" and chronological age is underestimated. A low body mass index, calculated from weight and height, is associated with over age entry and progression, low achievement and drop out. The research emphasises the importance of early interventions to obviate stunting (Rolleston et al., 2010; Buxton, 2011). Fieldwork indicated that many children were not aware of their birthday and were uncertain of their age. School record keeping was often incomplete and birthdates were not collected for every child.

The fieldwork also identified very low levels of achievement in some rural schools with performance three or more grades below the norm for the grade. Attendance in some of the schools is below 60% on a daily basis indicating that much learning time is being lost. There were also instances were lateness and absence were followed by corporal punishment, providing a disincentive to attend in the future. Patterns for drop out were clearly varied with some patterns signifying likely drop out in the future. None of the schools had systems that recognised these patterns and intervened to resolve the various issues that were likely to lead to drop out.

Some Policy Messages

- The capitation grant has had an impact on initial enrolment but this effect may not be sustained. Introducing capitation grants can only result in the abolition of tuition fees once. If it is to encourage participation in the future the grant needs to represent a more significant proportion of unit cost per pupil so that it can be used to improve the quality and enhance the classroom environment and learning resources available (Akyeampong, 2011). Part of the capitation grant should be ring-fenced for learning improvement. It should also be tiered and linked to deprivation indices for districts so that the poorest school districts receive more.
- Future education policy needs to target marginalised groups more purposefully and further flat rate subsidies to all household should

be avoided in favour of directing subsidy to the poorest. The current flat rate subsidies benefit richer areas and households especially at JHS and senior secondary school (SSS) level and there is a case for fees to continue to be charged to children from richer households in these schools and the income used to improve quality.

- There is a great need to increase investments into public basic schools in rural areas to improve their quality so as to give children from poor household's access to a basic education that has real potential to improve their chances of accessing post-basic education. Most university entrants come from less than 20% of secondary schools and most of those who are successful come from private primary schools. This is both inequitable and inefficient.
- It is important that indicators for measuring progress in educational access include distributional measures of improved participation and progression across the basic school cycle to establish whether equity has been improving. This should be used as a core measure of progress, not aggregate enrolment rates. Key indicators include giving special attention to monitoring the transition from Grade 1 to 2, and monitoring the transition from Grades 6 to 7 and 9 to 10, and to age in grade and completion rates. Participation by children from different household quintiles should be included in the indicator system.
- Investments in improving quality education in early primary schooling (and preschool) should be given priority. In public schools, more experienced and more effective teachers should be encouraged teach in the early grades and should be incentivised to achieve improved learning with high progression rates at the appropriate age through the primary school system.
- Every local authority and school should develop a database which links registration of births with expected year of school enrolment for children within different catchment areas. This will require collaboration between district health and education authorities. At the beginning of each academic year, this data can be used to help identify who has enrolled, not enrolled, or moved out of the catchment area of the school. This should be piloted in areas which have a history of poor enrolments, and then rolled out nationally.
- Birth registration should be linked to sensitisation campaigns to highlight the demerits of over-age enrolment especially in rural areas. The goal should be to eliminate over entry within the next three years and minimise repetition to below 5% of children, especially in Grade 1.
- The introduction of conditional cash transfers linked to timely enrolment and progression should be considered in areas with high incidence of poverty, and where livelihoods are fragile.
- Incentives should be developed to reward schools that meet efficiency and effectiveness criteria for progression, repetition, drop out and completion rates.
- Introduce systems that can monitor attendance effectively for both pupils and teachers. A first step is to ensure that schools have enrolment and attendance records that can be held electronically at district level. Where there is mobile phone coverage data can be returned digitally. Circuit supervisors on regular visits to schools should monitor and update these records. Regular inspection of school attendance, achievement and promotion records will help to identify children at risk of dropping out, or who have dropped out, so that the necessary action can be taken at school level to reduce this risk.
- The CREATE studies have shown that there are a number of factors outside the education system that have an impact on access. These include fosterage and livelihood patterns especially those which involve seasonal migration and internal displacement. Some of the effects of these factors can be ameliorated with more effective and responsive educational administration. In the long term, investing in the development of deprived districts both in general and specifically educationally, should lead to improvements in the welfare of inhabitants and have a positive knock-on effect on household attitudes and participation in basic education. In some areas e.g. parts of the north with low population density and seasonality, novel methods of service delivery drawing on the effectiveness of School for Life may need consideration. Universal enrolment and completion of basic education depends on improvements at the margin and in the most disadvantaged areas without which it will not be achieved in 2015 or indeed at any time in the future.

India: Research Overview, National University of Educational Planning and Administration, Delhi

The CREATE community and school study in India (ComSS) covered 90 schools and 6,431 households from 36 villages selected from four blocks of three different districts, namely Rajnandgaon district of the state of Chhattisgarh and Rewa and Dindori districts of the state of Madhya Pradesh. These villages were the focus of an earlier study in 1990 (Govinda and Varghese, 1993). In all over 9,000 children were identified in the study areas who were enrolled in the case study schools.

Basic school 'roster data' on children including their name, age, caste, grade, father's name, residence, presence in school on the day of the visit, attendance in last month, and performance according to teacher's perception was collected in three rounds (2007, 2008 and 2009). In addition, semi-structured interviews were conducted with cluster resource coordinators (who are recruited to provide academic support to teachers at school level) and also with community members and parents. The school survey also included competency tests with Grade 4 and 5 children in Hindi and mathematics for which test papers were developed at NUEPA. Around 2,000 children took these tests.

Some Findings

All the case study areas have shown considerable progress in educational access and enrolment rates are much greater than in 1990, especially in the most deprived areas. The number of primary schools has increased from 35 to 88. However, absenteeism is a serious problem. The proportion of children absent for four or more days in a month (about 20% of learning time) varied from about 12% in the best district to 25% in the worst. The most frequent reason given for absence was illness, with domestic chores and work being given as the next most common reason. Many children thus miss school days, repeat grades and finally drop out from school in a vicious cycle of deprivation and disadvantage (Bandyopadhyay, Das and Zeitlyn, 2011).

Learning together

The incidence of repetition in all three research clusters is high. In two of them about one fifth of children were found to have repeated their class at least once since they entered school. Repetition was much more common in government run formal or Education Guarantee Scheme (EGS) schools and very rare in private schools. The proportion of over age pupils in each of the three clusters was also striking. Those who are one year overage or more account for between 40% and 70% of all students in Grade 5. Those two years over age or more account for between 16% and 49% in the respective clusters. By Grade 8 between 25% and 50% are over age by at least two years. In Grade 1 between 30% and 40% are one year over age and 6% to 12% are two years over age.

This suggests that the problem of over age is both due to late entry and to repetition in higher grades. Children who are over age are at risk of drop out and may not reach the end of elementary school until they are well over 16 years old. Making children repeat the same grade may de-motivate them, causing early dropout. It certainly increases problems associated with being over age in grade (Govinda and Bandyopadhyay, 2010b).

The incidence of drop out appears to be between 5% and 10% a year across the clusters and was greater in 2010 than 2009. There was little difference in dropout rates of boys and girls. Overall between 20% and 35% fail to complete Grade 5 in the case study clusters. About 11% of children in the CREATE household survey did not go to school. For some the reason given was the unfavourable location and distance needed to travel to the nearest school. Children from poor households were more likely not to attend. The most frequent reasons given were household work (20%) working for income (11%), and the costs of

going to school (5%) (Govinda and Bandyopadhyay, 2010b). Other evidence indicated that the combination of inflexible unfriendly schools, disinterested, demoralised teachers and poor facilities pushed some students out of school, and that supply side factors are important in determining dropout and absenteeism (Reddy and Sinha, 2010). Children from households with little or no previous educational experience are more likely to be excluded from schooling. Many first generation learners live in environments that do not encourage them to learn and continue their education and 38% of students were first generation learners in the case study villages (Govinda and Bandyopadhyay, 2010b).

Girls from poor, scheduled castes and tribes, and Muslim communities tend to be more disadvantaged than their male counterparts and a larger proportion of girls rather than boys from these groups were not attending school. Girls from disadvantaged groups are more likely to attend government and EGS schools, and more boys attended private schools which often have better infrastructure and are thought to provide higher quality education (Bandyopadhyay and Subramaniam, 2008; Bandyopadhyay, 2011). More than half of the parents of girls who never attend school were of the opinion that they do not need to send their girl children to school. The reality of girls' exclusion is further complicated by caste, religion, ethnicity and age.

Programmes have been instituted to help traditionally disadvantaged groups Scheduled Caste, Scheduled Tribe and Other Backward Class (SC, ST, OBC) to attend school. 88% of SC, 79% of ST and 95% of OBC children go to school in the case study areas. However, educational access and retention remains unsatisfactory. 43% of ST and 44% of OBC students are recorded as having dropped out before completion. In recent years Muslim children have been identified as having unusually low levels of access (Sedwal and Kamat, 2008; Govinda and Bandyopadhyay, 2010b).

Amongst those who completed Grade 5 the transition rate into upper primary was between 89% and 62% across the three clusters (Govinda and Bandyopadhyay, 2010b). In Uttar Pradesh in another study, the increased cost of secondary schooling appears to be the most consistently significant factor affecting transition to secondary school, while distance also played a role (Siddhu, 2010).

The results of a competency test conducted under CREATE to assess the learning level of children of 4th and 5th grades revealed that there were large numbers of children who did not have mastery over language and arithmetic. Only 12% of children passed the tests at qualifying level in the lowest scoring cluster. About a quarter of Grade 4 children failed to score any marks on the mathematics test in one of the clusters. The competency tests did show that the learning level of children in Grade 5 is higher than in Grade 4 and demonstrated that one additional year of attending school did make a difference in the average learning level of children. However overall there was clear evidence of generally low levels of achievement well below expectations for the grade.

Another major concern is the subject mastery of teachers. Around one fourth of teachers find it difficult to teach any subject taught in school while one out of 12 teachers including a few with post graduate qualifications feel they are not competent enough to teach the subject that they have been assigned to teach. This is a disturbing situation in the context of the silent exclusion that is attributed to absenteeism, poor learning level, and the high repetition and drop out prevailing in these three clusters (Bandyopadhyay, Umabati and Zeitlyn, 2011).

Teacher management is an important issue in those clusters where there is a wide range of Pupil Teacher Ratios (PTR) between schools. There are extreme variations. One of the case study schools has seven teachers though it has only 11 students. Other schools have only one or two teachers and PTRs of over 70:1.

Many of the schools in the case study area are small with fewer than 100 children. The problems of small, single teacher schools with multi age and multi grade classes are accentuated by the shortages of qualified and trained teachers (Blum and Diwan, 2007; Blum, 2009). Many of the under-qualified and untrained teachers are found in small schools in the most rural districts. While small community based schools help enrolment,

there is some concern that many small schools have low standards and limit the chance for meaningful learning (Govinda and Bandyopadhyay, 2010b).

Not a single government primary school in the tribal cluster of Dindori has a toilet. In the second cluster 60% of schools do not have toilets, and in the third 27%. Many also do not have clean drinking water available (Govinda and Bandyopadhyay, 2010b).

Some Policy Messages

- Many young children are denied access to early childhood care and education (zone 0). Many of these children suffer from malnutrition and undernutrition (Sood, 2010). The states need to give more attention to improving the services provided by the Integrated Child Development Services (ICDS) that run Anganwaris which are attended by the majority of poor and disadvantaged children, particularly girls (Bandyopadhyay and Behera, 2010).
- Following the recommendations of the Right to Education Act, each school needs to draw up its plan and budget the activities for its further improvement involving local people and government agencies. This needs to be prioritised and has to be part of policy of local governing bodies including Panchayati Raj Institutes (Govinda and Bandyopadhyay, 2010a; Bandyopadhyay and Dey, 2011).
- The analysis highlights the need for policy initiatives with respect to recruitment of teachers and upgrading their capacity. The analysis also identifies many single or two teacher schools, and these need multi-grade teaching approaches. Many teachers, despite increasing levels of qualification, have difficulties dealing with multi-grade classrooms and schools. The professional development of teachers needs more attention and they should also be encouraged to receive further education to improve their subject knowledge.
- There is a need for a database on the status of teachers at the school level to aid teacher deployment. Extreme values of PTR should be addressed and all schools staffed at similar levels of 30-35:1.
- The low motivation of teachers to serve in remote rural areas needs to be addressed so that more rational and equitable deployment of teachers

can be achieved. Levels of teachers' morale are central to attempts to improve learning. Teachers need to be supported and encouraged to teach in poor rural areas.

- Remedial teaching needs to be developed and introduced especially where there is high absenteeism and repetition. It is very important that schools and communities take action within the school to encourage regular attendance of children and monitor their learning level.
- Provision of free nutritional meals and health care facilities in school protects children from poor nutrition and ill health which are associated with low attendance and poor learning levels.
- Policy makers need to pay attention to the availability of improved physical facilities along with provision for improving teacher supply, deployment, and teacher attendance across the states.
- It is important to implement the 'no detention' policy and ensure progression at the right age for the grade. This needs links to continuous and comprehensive evaluation of learning with diagnostic characteristics. Too many children are over age for their grade and may not complete schooling.
- Better developed areas are served by private providers and government schools, whereas poorer underdeveloped areas have the worst facilities and teachers. As a result of this, despite being enrolled in school, children living in remote areas are denied meaningful access. Priority provision of quality schooling facilities by the government to poor areas may break the nexus between location, social inequality, gender and poverty that together cause exclusion of children from schooling. Private schools do not provide access to the poorest (Härmä, 2010).

South Africa: Research Overview, Education Policy Unit, University of the Witwatersrand

CREATE research in South Africa involved mixed methods and two rounds of data collection. Case studies were carried out in eight schools in the Ekurhuleni South district of Gauteng and six schools in the Dutywa district of the Eastern Cape, with a focus on learners in Grades 1, 3, 5 and 7 in 2007, and Grades 2, 4, 6 and 8 in 2008. Key baseline data was collected, including copies of registers, repetition data, new admissions, academic records, the Annual Schools Survey and school policy documents.

Interviews were carried out with school principals, mathematics and English educators and district officials. A baseline secondary analysis provided district-level indicators on learners' degrees of vulnerability, with regard to over-agedness, repetition and drop-out. 1120 Learner Profile Cards were completed by Ekurhuleni South learners and 600 by Dutywa learners.

More information was gleaned through 'Day in the Life' activities, which involved shadowing one class in each grade through an entire day, and school and classroom observations were also undertaken. A sample of children were tested to establish their levels of achievement. Community fieldworkers were hired to search for out-of-school children between the ages of 7 and 15 as well as older youth who had not completed Grade 9.

Some Findings

Poverty is closely associated with educational exclusion in South Africa. One indicator of the extent of poverty is the fact that, in 2007, 65% of children aged 0-6 years received a child support grant, with 20% also receiving a care dependence grant and or a foster care grant. If receipt of the grant is recognised as an indicator of poverty then most children are in poor households. This of itself does not result in exclusion from the basic education phase since the majority of learners are enrolled up until the end of Grade 9. Nevertheless, poverty is associated with hunger, and hunger affects school attendance and academic performance. In 2003 children in 24% of households were always, often or sometimes hungry (DoE, 2006b:21). Poverty also makes the indirect costs of education, including uniforms, books, stationery, examinations, transport and the opportunity costs of education for older children more difficult to bear (Motala et al, 2007; Sayed and Motala, 2009).

Schools themselves play a big role in encouraging or discouraging access. The persistence of racism, sexism, bullying and xenophobia does not make some schools very inviting places, and this is compounded where there is poor quality of teaching and learning. The poor state of school

infrastructure, shortage of classrooms, lack of decent toilets and play-grounds detracts from a healthy learning environment. The absence of state services to support schools in terms of social and psychological issues places increased burdens on teachers who are already overloaded (Williams, 2010; Motala and Dieltens, 2010).

Parents and guardians are not always able to provide the necessary background and knowledge of schooling to support their children, and many households are fractured. More educated parents are likely to encourage learning and to send their children to higher performing schools (Motala and Dieltens, 2010).

With unemployment hovering around 25% (2009 figures), there appear to be few economic rewards for remaining in school, let alone completing Grade 9, unless access to higher education is probable. Prior to the introduction of no fee schools, the second most important reason (after fees) given by learners as to why they remain out of school is that it is useless or uninteresting: a survey in 2004 revealed that almost 10% of learners overall, and more boys than girls (13.5% as against 6.5%), hold this view of the value of education (OECD, 2007:50). Our case study data confirmed that many learners had doubts about the value of remaining at school if they were unlikely to pass matriculation.

Over-age children are a problem throughout the system, but especially in the higher grades. Over-age entry to schooling is being addressed by the age-grade norm policy. An unintended consequence is that many learners who would have repeated at lower grades are being allowed to progress, and some repetition is being deferred to higher levels of schooling (Motala, Dieltiens and Sayed, 2009; Taylor et al., 2010). The enrolment of under-age learners into Grade 1 despite policy continues to be a feature and is used as pre-school provision (Taylor et al., 2010). Age appropriateness has a distinct gender bias with more female learners being age appropriate than boys by Grade 9 (Motala, Dieltiens and Sayed, 2009).

The direct costs of education are being addressed through 'no fee' schools, but the indirect costs – of transport and uniforms in particular – are still a huge burden for poor households. Moreover, the persistence of fee-charging government schools alongside 'no fee' schools helps to sustain a class-differentiated two tier education system (Motala, 2008). Private schools make little contribution to overall enrolments (less than 5%) and most are high cost.

Levels of achievement are very low, amongst the lowest in the region. Children performed very poorly on CREATE attainment tests. Learners performed way below their expected levels in the tests, over-age learners were worse off in terms of their performance, prior learning for the majority of learners was poor i.e. they were not on the expected level for the grade (Gilmour et al., 2009; Pereira, 2010; Taylor et al., 2010)

Distance from school as well as schools' official language of learning and teaching limit school choice, forcing some learners to travel long distances to other schools. Inadequate mastery of the language of learning and teaching is also a major factor in the abysmally low levels of learner achievement; yet many parents prefer (with their children's concurrence) for their children to be taught in the second language of English by teachers who are themselves second-language speakers of English (Motala and Dieltens, 2010; Lafon, 2009; Alexander, 2010).

CREATE research found very little actual teaching and learning taking place in case study schools. Lessons often started late, much time is spent maintaining order, teachers do most of the talking and learners are passive and contribute little. The absence of writing and written work in classrooms was striking, rote learning and chorusing of lessons was common and coverage of the curriculum was very uneven (Letatsi, 2011). Corporal punishment is common and continues to be a feature of many schools and at different levels despite being formally proscribed.

Figures from the Community Survey in 2007 indicate that there are about 386,000 children who are out of school (Shindler, 2010). The great majority of these learners have dropped out. Much smaller numbers are children who have never been to school. CREATE research highlights specific factors that are correlated with exclusion including disability, household structure, poverty and lack of access to social grants. All of these increase the vulnerability of children to exclusion.

Some Policy Messages

- Language policy provides for 11 languages to be used but in practice English tends to be chosen most often as the language of learning and teaching (LOLT), along with Afrikaans, despite rhetoric of equality regarding the other official languages. School language policies impose limits on school choice and need clarifying and making more consistent with the government's broader Language-in-Education Policy. Much learning takes place using languages that are not the LOLT, but this is often unplanned and not reflected in learning materials. Language poilicy and practice needs revisiting

- Schools in townships and rural areas need to be more welcoming and child friendly in terms of infrastructure and facilities, pedagogy, care and community service. Aside from encouraging more active civic participation in schools and ensuring that teachers and principals always treat parents with respect, more attention could be given to planting trees, building playgrounds, painting murals, fixing desks and chairs, involving Community Development Workers in after-school activities, or paying stipends to unemployed matriculants to read to learners after school and to coach sport.

- The continued use of corporal punishment often appears counter productive since it can act as a disincentive to attend school and may be used inconsistently. Though it is proscribed it continues to be widely used. Steps should be taken to end this practice which can make schools very unfriendly to children.

- The quality of teaching needs to be improved, through training as well as financial, practical and moral support for teachers. Classroom practice, pedagogical knowledge and in-service training need to take account of the gaps in teacher's knowledge and plan for this.

- Teacher accountability continues to be key. The rights of teachers to strike in support of better wages and working conditions is enshrined in law and in the constitution. Historical precedents have meant that school inspection can be infrequent. The low levels of numeracy and literacy scores in the basic education phase evidenced in both local and international benchmarking and the poor matriculation results (school leaving exam rate – 62% in 2009) indicates that teachers at the school level need to be made accountable for what they are delivering and what the outcomes are. CREATE research has illustrated that on too many occasions teacher contact time was limited, teachers were not present in the school during the school day or teachers were present at the school but in staff rooms or basking in the sun instead of teaching.

- Repetition as remediation must be used as part of a clear pedagogic strategy; formative assessment should be promoted to give diagnostic insight into learning needs; on schedule progression accompanied by achievement consistent with age grade norms should be the expectation for all learners (Taylor et al., 2010).

- The reality in South African classrooms is that there is often a wide range of ability within the same grade and that monograde teaching is the normal practice despite the fact that there are small schools with too few teachers and classrooms for every child to be taught in a reasonably sized grade group. Multigrade teaching and learning should be made more widely available.

- There is a need to track learner's migration, since it is common for children to travel long distances to school and to change schools. Migration can take many forms that include rural-urban, inter-urban and inter-school movement, as well as migration between provinces and from outside the country. Inter-school migration is likely to be affected by affordability, distance, access to transport and the perceived quality of education, as well as school language policies, ethos and reputation. It can contribute to age in grade slippage depending on how transitions are managed.

- Information at all levels is lacking that would allow accurate tracking of first registration, progression, repetition and drop-out, and of achievement. Child identity numbers have been introduced (e.g. in Western Cape) along with regular assessment using standardised instruments. This practice should be extended to all provinces.

Policy Analysis and the Political Economy of EFA

Three studies – of the policies, politics and progress of access to education (in Ghana, India and Sri Lanka) were conducted (Little, 2010 a, b, c), using the same broad questions and methods. The questions were (i) What progress has there been in access to basic education since independence (ii) What policies for access to basic education have been promoted? (iii) What role have political regimes played in the formulation of policies on access to basic education? (iv) What role has political will played in the process of policy formulation and implementation? (v) What have been the drivers and inhibitors of the implementation of recent major reforms?

The methods used were interviews and documentary analysis. Interviewees included current and retired senior civil servants and government officials, vice chancellors and university staff, trade union officials and, in the case of Ghana, former district directors of education. Most interviewees had played various roles in policy formulation and policy implementation at different levels over many years. Documentary sources included published histories of education, research reports, policy documents, commission and committee reports, memoirs of civil servants, evaluation studies, reports from 'partner' agencies such as World Bank and DFID and conference papers.

The studies were informed by theoretical, conceptual and methodological insights from the international social science literature (Lall, 2007; Little, 2008a). The country studies were informed

inter alia, by a working definition of political will as a sustained commitment of politicians and administrators to invest the necessary resources to achieve specific objectives and a willingness to make and implement policy despite opposition, by theoretical frameworks of policy formulation and implementation as stages and processes and by important methodological distinctions between policy texts and policy discourse.

The conclusions from these studies, combined with those of other CREATE policy studies from East Africa (Oketch and Rolleston, 2007a) and Nigeria (Obanya, 2011), and case studies of policy implementation from China (Wang, 2010) and Zambia (Mwanza, 2011) are as follows:

- The formulation of policies to promote improvements in access to and the quality of basic education is apparent in many countries long before independence, after independence and before Jomtien, and after Jomtien. Lessons can be learned from the long history.
- The policies to promote improvements in access to and the quality of basic education appear in both democratic and non democratic political regimes, in regimes of the left and of the right and the military. While democratic regimes are more likely to generate pro-poor education polices, examples from Ghana in the 1980s and Nigeria in the 1970s attest to the convergence at times between the interests of military regimes and those of the poorest.
- In some contexts constitutional change and legal enactment is a necessary condition for change in pro-poor policies in education. Constitutional change in Sri Lanka in 1931 paved the way for an expansion of free education from kindergarten to university. More recently constitutional and legal changes that assert the rights of all to education in Ghana (in 1992) and India (2002, 2009), have been followed by major increases in financial expenditure committed by government.
- Increases in literacy rates are apparent over time in most countries. However, it is clear that performance on a range of indicators usually falls far short of policy intentions. Work in Kenyan primary schools adds greatly to our understanding of the impact of national policies of free education on individual primary schools, on flows of students through those schools and their transitions to secondary schools (Oketch and Somerset, 2010). This study of the impact over time of attempts to universalise access to primary education shows very uneven patterns of growth. Some schools limited their intake of new students to historic levels and did not expand significantly while others, in strong contrast, accepted large numbers of new entrants without complementary increases in the number of teachers, teaching resources, and space. Transition rates into secondary schools appear to have increased after the announcement of fee free schooling, polarisation remains very strong, with access to the best secondary schools restricted to a small sub-set of primary schools. Moreover, chances of continuing beyond secondary to university are strongly stratified with those attending provincial secondary schools having less than a fifth of the chance of those in national schools and those in district schools less than one hundredth the chance.
- In general, across countries, access to primary schooling may have improved. For many it is likely that the quality of what they have access to has deteriorated. Improved access often seems to have been accompanied by no reductions in the unequal chances of proceeding to higher levels. These findings are supported by analysis of cross country data sets, and are a reminder that CREATE's expanded vision of access, which includes reduced variations in quality, fairer transition to secondary, and greater equity in achievement and progression to higher levels, needs highlighting in policy dialogue.

Looking to the future

- Political will is a necessary but not sufficient ingredient for the implementation of educational reforms. But as we know, policies, constitutional changes, legal enactments, plans and declarations do not ensure education for all on the ground. Administrative, technical, financial and human resources are as essential and require sustained attention. The analyses from Ghana, India and Sri Lanka point to similarities and differences in the constellation of factors that promote and inhibit reform. All point to the importance of a range of non political technical factors – technically sound and detailed plans of action at multiple levels, adequate finance to translate plans into action, adequate human resources, involvement and sense of ownership by administrators near to the ground, regular monitoring and evaluation and sustained effort. Where any of these is lacking then progress is constrained.

- In the Indian case it was notable that the role of civil society and the non-government sector was mentioned time and again as a driver of education for all, in a way it was not in Ghana and Sri Lanka. And in all countries inhibiting factors included financial wastage (less politely, financial corruption) and the restraining role of trade unions, though it was in India that were cited most often as having a constraining effect.

- Political will is often understood to mean national will at the highest level of politics. However, our analysis from Ghana, India and Sri Lanka, combined with our case studies of particular aspects of reform in China and Zambia, suggests that the concept of will also needs to be understood at the level of implementation and at the level of multiple actors acting in their own, rather than collective interests.

- During implementation a myriad of political wills of different stakeholders comes into play. Political wills in education reform are exerted by many – not only by high level Presidents and Prime Ministers, Ministers of Education, Ministers of Finance and political parties but also by myriad interests at the local level – those of citizens, local politicians, teachers, parents and officials in local and provincial government administrations. Not all political wills – high or low – are moving towards the same ends. And even if they are, a myriad other factors come into play in the translation of policy intent into policy in practice. We conclude that diverse political wills can often be enacted in contradictory ways. Political will can be a double-edged sword.

- A final message is posed for development partners: In calling for 'political will' in relation to the EFA and MDG goals, development partners assume that national planners will translate global goals into national goals, national plans of actions, targets, indicators and actions. The EFA declaration and framework of actions constructed at Jomtien and Dakar call for national action plans. But these plans are conceived of in largely technical terms and overlook the fact that, in the past at least, in-country plans for EFA (notably India's Plan of Action of 1986) have derived from policy and the national and local politics that surround the determination of that policy. No simple dose of political will from the highest level can substitute for the political to and fro, consultation and sense of ownership engendered by the politics of policy making. So in translating universal aspirations for EFA into partnerships that take root in and on the ground, judgements are needed about how much development partners need to understand about specific policy contexts, specific policy and practice histories and about the extent to which the interests of the poor coincide with the interests of political elites, in the present and the past.

CREATE Twelve Point Development Programme

CREATE's research has identified many possible actions that could influence future access to education within an expanded vision of what meaningful access requires. It has within its research products the basis for different toolkits tailored to circumstance that could profile the kind of interventions that would make the difference between more uneven and insecure efforts to improve access and those interventions that could secure the right to education for all children. There is no one prescription as initial conditions vary widely, national and local priorities are different, capacity is constrained, and the locus of responsibility to act is shared between many different stakeholders at different levels.

Strategic approaches to medium term planning of successful transformations to education systems have been outlined within CREATE (Lewin, 2007b). This toolkit to plan, project, budget and mobilise resources is one basis on which to proceed. Other protocols can be developed on the basis of the CREATE research products. To help frame discussion of possible strategies to implement programmes that would make the CREATE expanded vision of access a reality a generic twelve point development programme is outlined on page 58. Three things should be noted.

First, initial country conditions and baseline data have to be analysed and understood as a precursor to developing plans to improve access, whether proposed interventions are at national or local level. Insights into changing patterns of access over the last decade can give clear indications of the nature of the problems and the likely patterns of causality that continue to deny educational access to different groups of children.

Including the excluded

Where the data indicates that large external inputs in the past have failed to have the results Education for All envisaged, more resources may simply replicate history and expand inefficient and low quality systems with softening effective demand. Zonal maps can profile the topography of exclusion and how it has changed over time and the analytic studies of CREATE can indicate critical inhibitors to universal and more equitable access. Policy developed without an understanding of the recent past risks the kinds of failure that have resulted in EFA still not being achieved 20 years after the Jomtien World Conference.

Second, the political economy of EFA is such that unless there is sufficient local and national political will, willingness and ability to allocate adequate resources, and accountability that ensures efficient utilisation, attempts to achieve greater educational participation are likely to prove futile. A key difference between low income countries which have succeeded and countries which have failed to approach EFA goals, lies in consistent political will, readiness to invest what is necessary, and the ability to use resources effectively in ways that are accountable.

Third, approaches to improved access need to be comprehensive and recognise that children, and the households of which they are part, exist within a web of relationships which will determine what access they enjoy and how supply and demand for education interact to generate opportunities for learning that has utility for reducing poverty. But approaches must also be specific and targeted where there are barriers and disincentives to go to school and to learn, and where structures interact with agency to lead to premature exit from schooling. Households, communities, schools and local and national education authorities all play a role in shaping opportunities and removing inhibitors of universal access to education.

Fourth, the CREATE twelve point programme is not a blueprint but a framework which could serve as the basis for the development of planned interventions at district level or above. This would have to be based on a bespoke diagnosis grounded in particular education systems. It would need to be fine tuned as it was developed making use of formative feedback. An overall statement of the goals of the CREATE twelve point plan is developed opposite. And it needs to be interrelated to national plans and development partner programmes.

Waiting to learn

High demand for school places

Going home after school and sharing the cost

Goals of the CREATE Twelve Point Development Programme

All children in the target population should:

- enrol in the year in which they become six years old
- progress over the next six years with no more than one repetition and remain within one year of the nominal age for the grade
- attend for at least 90% of the teaching days available
- transit to lower secondary school and complete nine years of schooling
- learn in classes of no more than 40 in schools with clean water, sanitation, basic services, light, heat and ventilation, and adequate learning materials
- be taught by trained teachers who are present in class at least 95% of the teaching days available
- achieve at levels within two years of the norm for their grade
- have equitable access to affordable schools located within 30 minutes travel of households at primary level and 60 minutes at secondary level

The Twelve Point Development Programme

This framework for a programme of action is organised around twelve headings which locate possible areas of intervention. Each has four bulleted priorities, which can be supplemented with additional action points. The invitation is to develop this framework and link it to baseline data and rigorous diagnosis of problems located in particular education systems. The framework can be used to incubate ideas and shape policy dialogue that draws down on evidence, and to commission new studies where there are known unknowns.

1. Early Childhood Health

- Basic health checks regularly for all children organised at school or clinic including indicators of malnutrition; diagnosis of infection and disability; monitoring of health status; access to primary health care
- Training of teachers to act as sentinel observers to recognise common health issues in children
- School environment health audits and mandatory provision of clean water, sanitation etc
- Development of *circles of support* around vulnerable children

2. Initial Enrolment at Age Six

- Registration of all children with tracking identities to accompany child through school
- Child seeking school and community activities to enrol every 6 year old child
- Extension of pre-school at affordable cost to four and five year olds
- Identification of vulnerable groups e.g. those with disabilities, orphans, ultra-poor households, malnourished or undernourished children, girls, immigrants, pastoralists, fisherfolk and design of appropriate interventions to match circumstances

3. Drop out

- Audit and track out of school children (drop outs/never attended); identify causal relationships; mitigate push factors (e.g. costs, relevance, corporal punishment, gendered violence; distance); teachers visit the homes of drop out children to enquire after them
- Incentives/actions to promote re-entry to schools in appropriate grade for age; develop child friendly and child seeking schools
- Alternative provision of basic education where return to school is not viable
- Expand access to lower secondary school and a full cycle of basic education; improve transition rates into secondary

School midday meals

4. Silent Exclusion

- Develop child tracking cards to monitor grade progression, age in grade, attendance, and learning achievement; develop protocols to support children at risk of drop out. (e.g. below 90% attendance, 2+ years over age, 2 years below attainment norms)
- Adopt automatic promotion with support for learning of less capable to ensure smooth progression through early grades at appropriate ages; prioritise reading and number in early years
- Provide support for improved pedagogy and teacher competence through training, mentoring, and enhanced learning environment; monitor teacher attendance; provide incentives for effective practice
- Promote curricula relevance and the utility of learning; develop pedagogies that are effective and which make private tuition less attractive; link formative assessment to enrichment and remediation; develop multilevel learning goals linked to range of capabilities

Studying hard

5. Transitions

- Chart flows of children through primary and secondary school and analyse who goes to secondary school and who transits to higher levels of education and training; use equity indicators
- Link analysis of flows for children through the education system to the basic arithmetic of youth employment to highlight supply and demand issues in the labour market
- Review curricula and tracking of children into different school types and different curricula option in the light of flows and labour markets
- Plan and project how to achieve and sustain high levels of participation through to Grade 9 and beyond and identify critical inputs needed

6. Effective Pedagogies and School Size

- Identify effective learning and teaching strategies through inventories of good practice, analysis of EMIS and performance data, and action research. Promote better practice.
- Design, develop, pilot, evaluate new pedagogies where these promise and deliver large learning gains
- Map schools, class sizes, and pupil teacher ratios; locate additional capacity in relation to need
- Identify where multi-grade pedagogies are needed (small schools, multi-age enrolment) and where classes are oversize (urban slums, migrant schools); support curriculum development and training

The Twelve Point Development Programme

7. Buildings

- Review building stock and demand for space/facilities; project forward and build capacity through appropriate mix of additional classrooms and new schools with quality/cost control of procurement
- Review services, clean water, sanitation, infrastructure and act to meet national standards on all sites
- Develop protocols for maintenance/ rehabilitation to ensure safe and congenial learning space
- Mobilise public and private sources of funding for construction and maintenance and use school mapping indicators

8. Learning Materials

- Assess quality, availability, and costs of core books and learning materials for children and plan for a book per child per main subject or the equivalent;
- Identify enrichment materials and other learning and teaching aids and plan provision
- Adopt effective and efficient procurement and distribution of books and learning materials
- Develop affordable and effective strategies for information technology evaluated independently

9. Teachers

- Assess the stock and deployment of teachers and project supply and demand. Audit distribution of teachers and pupil teacher ratios and act to meet norms and reduce variance
- Review the teacher education system and reform to prioritise skills and competences linked to more effective learning; upgrade subject and pedagogic knowledge and skill; consider less emphasis on initial training and more on in-service support
- Identify lost teaching time including absenteeism, manage incentives to increase time on task
- Provide incentives for difficult postings including housing, promotion, subsidies of training and additional payments

Training teachers in Tanzania

10. Assessment and Monitoring

- Provide support for regular formative assessment in main subjects with feedback designed to identify learning problems and improve achievement; keep records of assessment for each child and review periodically; train teachers to diagnose misconceptions and learning difficulties
- Invest in enhanced data collection and monitoring of schools using improved data collection and more useful indicators of performance
- Develop annual standardised monitoring assessments and assist in managing performance improvement
- Commission a rolling programme of analysis of aspects of system performance

11. Financing

- Project costs of universal access in short to medium term for integration into medium term expenditure plans; identify gaps in financing and methods of filling any such gaps
- Review sub-sectoral allocations, unit costs, and other patterns of resource allocation with a view to enhancing access, equity and affordability
- Identify necessary cost saving and efficiency enhancing reforms
- Determine modalities of external financing within a multi donor framework

12. Indicators and Equity

- Identify strengths and weaknesses of key indictors of access currently in use
- Develop and use age specific enrolment rates, on schedule completion rates, and appropriate indicators of equity in participation including gender, household income, location, social group
- Develop goals and targets with stakeholders that are fit for purpose and are challenging but achievable
- Link planning to desired outcomes which are more comprehensive and balanced than the MDGs and Dakar Goals, and locate these within a national development strategy

Expecting the best

Educational Access, Transitions and Equity Revisited

CREATE's research confirms that access to education broadly defined is central to any development strategy that seeks to diminish poverty and enhance well being. Equitable access to effective and relevant education is critical for long term improvements in productivity and wellbeing. It is also enshrined as a universal human right in most countries. Education is a public good which has social benefits above the level of the individual. Poverty reduction is unlikely unless knowledge, skill and capabilities are extended to those who are marginalised from economic activity by lack of literacy, numeracy, and higher level reasoning capabilities.

In most societies households and individuals value participation in education and invest substantially in pursuing the benefits it can confer when they have the opportunity. The rich have few doubts that the investments pay off; the poor generally share the belief and recognise that increasingly, mobility out of poverty is related to educational attainment.

There is no theory of development that advances the counter factual – that investment in education individually and collectively is somehow not developmental. The reasons are obvious. Knowledge and skill do transform capabilities, competencies that are acquired through education do have value in labour markets, and increasingly social selection and mobility are mediated by educational progress and qualifications. Where investment in education fails to have developmental benefits the reasons are more likely to be because what is on offer is of poor quality and low relevance, and because of market failures in employment systems, than it is because the basic propositions of human capital linked to increased knowledge and skill are untrue.

Looking for worthwhile learning

Development is inextricably linked to equity and can be considered as part of the definition of development. When inequality increases, especially where this is more than a transient, then development may be compromised since a few will benefit much more than the many. In education this may represent a loss in opportunity across populations where capability is distributed widely across social groups and between generations. If inequalities grow so also do the risks that social conflict may become more likely, capabilities will be underutilised, and individual benefit will squeeze out collective gains. Increasingly equity is appearing as central to development strategies and is becoming more prominent in the work of UNICEF and UNESCO, the Global Marketing Report and the Fast Track Initiative.

Developing societies use educational access and attainment as a primary mechanism to sort, select and confirm subsequent mobility into different social and economic roles. Whether the best explanations are human capital or screening is an enduring topic of debate. Universally those with more education on average enjoy greater incomes and have higher levels of wellbeing both at the individual level and in national comparisons. Who goes to school, and increasingly in many developing countries who goes to secondary school, is a major determinant of who will be relatively rich and who will be relatively poor, who will be healthy and who will suffer from preventable disease.

Economic development may or may not be accelerated by greater equity in the short term. But there would seem much to lose and little to gain by long term strategies that do not seek to raise the educational level of the next generation and distribute knowledge and skill related to productivity more widely. Delivering rights to education is of itself developmental and contributes to greater equity.

CREATE research shows that much has been achieved within the framework provided by Education for All programmes. However, several insights stand out.

- First, an expanded vision of access is far from being achieved in many low enrolment countries where less than half the school age children complete primary school and transit to secondary
- Second, much access is compromised by high levels of over age enrolment, poor attendance, and low levels of achievement which individually and collectively can lead to silent exclusion
- Third, children who never attend school have characteristic forms of exclusion often linked to other marginalisations; children who have reached the age of ten without attending school are very unlikely to ever enrol
- Fourth, increasingly those out of school are those who enrol but subsequently drop out; the needs of those out of school have to be addressed alongside action to reduce drop out from future cohorts
- Fifth, poverty remains the most common factor associated with exclusion; gender, disability, HIV status, social group affiliation, location and many other exclusions may interact with poverty and need addressing in ways that recognise the interactions
- Sixth, physical infrastructure often falls far short of that needed to provide a secure, healthy and appropriate learning environment
- Seventh, learning materials vary widely in availability and quality but are central to achievement of learning outcomes
- Eighth, teacher supply and deployment are widely inefficient and compromise effective and equitable access to education
- Ninth, there are characteristic differences between high and low enrolment systems that signpost more and less effective practices.
- Tenth, indicators used for performance management at system level need to be fit for purpose and coupled to data collection and analysis that monitors progress and identifies opportunities for improvement.

In 2015 many countries will achieve the two Millennium Development Goals linked to education if these are narrowly defined. However, many will not achieve the CREATE expanded vision of access. But it is realising this expanded vision that will determine the impact of improved access on development. On-schedule progression with few overage children could lead to dramatic increases in completion rates especially for girls. Poor attendance of children and teachers requires community and school level actions and incentives. Poor achievement should not of itself be reason for drop out but an invitation to identify the causes and act to ameliorate them. There are no good reasons why all children do not learn to read and write, and achieve within two grade levels of national norms.

In the run up to the reviews of the Millennium Development Goals in 2015, new goals and time bound targets for educational participation and outcomes will be set for 2025 and beyond. Such targets and goals must be more than a list, and more like a recipe tailored to starting points and realistic rates of progress. They must link to development strategies rather than be free standing aspirations with no necessary connection to likely flows of resources and the capacity to implement programmes on a scale designed to achieve goals.

New targets and goals need to recognise that access is more than enrolment; that quality, equity and outcomes are inseparable from meaningful access; and that most of what needs to be known to universalise educational access and achieve basic learning outcomes for all is known. The problem is to couple this with robust diagnoses of the bottlenecks that inhibit progress, understand the lessons that can be learned from changing patterns of access in the past, mobilise the resources and build the capacity needed, and engage effectively with the political economy of development which will determine how much longer it will take to make a reality of Education for All.

CREATE team meeting at NUEPA in Delhi

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A selection of CREATE research publications

CREATE Research Outputs

1. Acedo, C., (2010) Expanding access to education with equity in South Asia, Prospects, Vol. 40, No. 3, 'Universal primary education in South Asia: A right that remains elusive' edited by R. Govinda and Manzoor Ahmed

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