Consortium for Research on Educational Access, Transitions and Equity

Improving Access, Equity and Transitions in Education: Creating a Research Agenda

Keith M. Lewin

CREATE PATHWAYS TO ACCESS
Research Monograph No 1

June 2007

University of Sussex
Sussex Institute
Sussex School of Education
Centre for International Education

University of Sussex
Centre for International Education

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 national and 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, is both a 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 is developing its research 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 partners 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 Education at Winneba and Cape Coast, Ghana: Professor Jerome Djangmah
The Institute of Education, University of London: Professor Angela W Little

Disclaimer

The research on which this paper is based 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.

ISBN: 0-901881-08-3

Address for correspondence:
CREATE,
Centre for International Education, Sussex School of Education,
University of Sussex, Falmer, Brighton BN1 9QQ,
United Kingdom

Tel: + 44 (0) 1273 678464
Fax: + 44 (0) 1273 877534
Author Email: k.m.lewin@sussex.ac.uk
Website: http://www.create-rpc.org
Email: create@sussex.ac.uk

Please contact CREATE using the details above if you require a hard copy of this publication.

Improving Access, Equity and Transitions in Education: Creating a Research Agenda

Keith M. Lewin

CREATE PATHWAYS TO ACCESS
Research Monograph No 1

June 2007

Contents

List of Tables

List of Figures

List of Acronyms

EFA	Education for All
FTI	Fast Track Initiative
GDP	Gross Domestic Product
GMR	Global Monitoring Report
GPI	Gender Parity Index
GPI 1	Gender Parity at primary school
GPI 2	Gender Parity at secondary school
GER	Gross Enrolment Rates
GER1	Gross Enrolment Rate for primary education
MDGs	Millennium Development Goals
NER	Net Enrolment Rates
NICs	Newly Industrialising Countries
SSA	Sub Saharan Africa
SWAps	Sector wide approaches
ZIP	Zone of Improbable Progress

Acknowledgements

This paper has been developed from discussions at a series of CREATE workshops with Partner Institutions and has benefited from many inputs from different research team members and from the CREATE Advisory Group. For all the contributions I am very appreciative. Thanks also go to Fran Hunt, Sylvie Lomer and Elena Dennison for editing and presentation of this report.

Preface

The Consortium for Research on Educational Access, Transitions and Equity (CREATE), was established with DFID support in 2006. It is a partnership between research institutions in the UK, Bangladesh, India, Ghana and South Africa. This paper is the first in the CREATE Pathways to Access Series which will be developed over the life of the consortium. Subsequent papers will be devoted to different research arenas and will include both research review papers and empirically based studies.

Access to education is at the heart of achieving many of the Millennium Development Goals, not just those that are explicitly educational. Though much is known about access in different countries, and some impressive gains have been made over the last decade, especially with girls education, many remain out of school, or nominally in school but at high risk of non completion. This paper begins the process of outlining a research agenda.

Professor Keith Lewin
Director of CREATE

Summary

The Consortium for Research on Educational Access, Transitions and Equity (CREATE), was established with DFID support in 2006. It is a partnership between research institutions in the UK, Bangladesh, India, Ghana and South Africa. This paper is the first in a series of CREATE publications which will be developed over the life of the consortium. The first part of this paper discusses why access issues remain at the centre of the problems of achieving Education for All and the Millennium Development Goals. Many children remain unenrolled at primary level, many of those enrolled attend irregularly and learn little, and large numbers fail to make the transition to secondary schooling. After outlining the magnitude of the challenge of improving access to universal levels, the paper develops analytic frameworks to understand access issues in new ways, and generate empirical studies related to each of the zones of exclusion identified. The last part of the paper briefly outlines some of the empirical research that is being developed.

Improving Access, Equity and Transitions in Education: Creating a Research Agenda

1. Introduction

Access to education is seen as a central plank in development strategies linked to the Millennium Development and Dakar goals associated with Education for All. These headline the achievement of universal primary education and gender equity in enrolments across all low income countries as an essential component of efforts to reduce poverty, increase equity and transform the developmental prospects of individuals and nation states. The recent history of attempts to universalise primary education access dates from the World Conference on Education for All in Jomtien, 1990 where pledges were made by the international community and national governments to achieve the goal by 2000. This did not happen and over 130 million children were estimated to remain out of school in 2000 at the time of the World Forum in Dakar. There were many reasons for the disappointing progress including the reluctance of some governments to make a reality of commitments to prioritise expanded enrolments, real resource constraints, bottlenecks in capacity and teacher supply, and difficulties in converting promises of external support into expanded external assistance.

In 2006 the Department for International Education of the UK Government commissioned three Research Programme Consortia[1] to develop new insights into educational access, quality and outcomes to respond to the need for new thinking and better analytic purchase on the challenges generated by the Millennium Development Goals (MDGs). The Consortium for Educational Access, Transitions and Equity (CREATE) was formed as a result of this initiative and drew together partners in South Asia, Sub-Saharan Africa and the UK with expertise and commitment to the goals of Education for All (EFA).

This paper is the first in a new series of CREATE research publications (http://www.create-rpc.org) designed to explore recent achievements, analyse current status, and identify opportunities and blind alleys in policy and practice that can make EFA a reality by 2015 and beyond. It seeks first to elaborate on a rationale for research on access, transitions and equity. Second to provide a reminder of the recent events that have led to commitments to EFA and some of their implications for research. Thirdly it provides an overview of the magnitudes of exclusion from education in Sub Saharan Africa and South Asia. Fourthly it offers a framework to reconceptualise access issues, which fifthly leads to a discussion elaborating a model used to locate CREATE research on access. The sixth section briefly outlines the emerging research agenda. Annexes include a reminder of the Dakar and Millennium Development Goals for education, and list some emerging research propositions. This first discussion paper therefore sets the scene for the more detailed reviews and empirical studies which will develop as the CREATE partnership evolves.

[1] The second RPC, EdQual, is focussed on educational quality. The third RPC, RECOUP, is focussed on educational outcomes

2. Why Access, Equity and Transitions?

2.1 Introduction

Access to basic education lies at the heart of development. Lack of education is both a part of the definition of poverty and a means for its diminution. Sustained and meaningful access to education 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. It is central to the long-standing and recent images of development that depend on the capabilities that create choices and freedoms that ignorance denies (Streeten, 1999; Sen, 1999). The basic propositions that underlie these observations are well established in the research literature and widely believed. Fairly universally poverty reduction is seen as unlikely unless knowledge, skill and capabilities are extended to those who are marginalised from value-added economic activity by illiteracy, lack of numeracy, and higher level reasoning that links causes and effects rationally. In most societies, and especially those that are developing rapidly, households and individuals value participation in education and invest substantially in pursuing the benefits it can confer. 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 education-related, albeit that their aspirations and expectations are less frequently realised.

There is of course no development theory of substance 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. Necessarily this observation depends on the proposition that educational provision does actually deliver knowledge and skill, and values and dispositions that are developmental – attributes that link access to educational quality, relevance, and livelihood and well-being outcomes.

The general case for expanding access to education is therefore compelling. Its recent manifestations in the MDGs and the Dakar Goals (Annex 1) confirms a consensus on the centrality of education to development. However it remains the case that the discourse that surrounds EFA and the MDGs is not grounded in an explicit single set of propositions about the role(s) education plays in development. Lively debates continue on the priority that should be awarded to investment at different educational levels, the increasing and diminishing returns associated with different types of educational provision, the characteristics of service delivery organised by States and by other civil society and commercially motivated groups, the relevance of curricula to different communities and their children - especially those with special disadvantages and vulnerabilities, effective pedagogies in different cultural contexts, values placed on different educational outcomes, and many other aspects of educational policy and practice. CREATE will engage in many of these debates directly and indirectly.

Development is inextricably linked to equity. For some, increased equity is part of the definition of development (Seers, 1977) and without progress to more, rather than less, even distribution of income, assets and opportunities development is compromised. Others take a more contingent view which holds that if inequalities grow so also do the risks that social conflict will become more likely, capabilities will be underutilised, and the "tragedy of the commons"[2] will act to generate individually desirable outcomes for some, but collective disadvantages for most. Modernising societies use educational access and attainment as a primary mechanism to sort and select subsequent generations into different social and economic roles. Whether the best explanations are human capital or screening theory, is an enduring topic of debate. Whatever the best explanations are, the result is that those with more education, and the qualifications that validate what has been learned, enjoy higher living standards, greater incomes and accumulate more assets. Who goes to school, and increasingly in many developing countries who goes to *secondary* school, is a major determinant of future life chances and mobility out of poverty.

Research on access has to be concerned whether efforts to expand participation contribute to improved equity in general and are themselves equitable. As with more general debates on development, growth and expansion of education systems which exacerbate existing inequality is unlikely to contribute much to inter-generational mobility out of poverty. Education systems are one arena in which States can seek to limit inherited advantages and promote greater equality of opportunity, albeit that greater equality in outcomes will always prove elusive. Access to education is very unevenly distributed in relation to household wealth in most poor countries. Discrepancies related to location, gender, cultural affiliation and many other signifiers of advantage may also be very conspicuous. And of course access narrowly defined as enrolment conceals vast differences in educational quality, resource inputs, and measurable outcomes.

For all these reasons CREATE includes in its agenda for research concerns for equity. Implicit in a rights based approach to access is the condition that the delivery of a universal right should be "means blind". Social development as a process has to value equity if it is associated with more rather than less democratic processes, greater participation in civil society and governance, and respect for human rights. Economic development may or may not be accelerated by greater equity in the short term. But there would seem much to loose 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.

The third strand of CREATE develops the idea of improved access to education as a vector promoting developmental transitions. Most importantly this is a reminder that the purpose of education for many is to transform capabilities. If educational process does not enable its beneficiaries to think, feel and act in different ways than they would otherwise do, it would seem to have little merit. The transformations can span many levels. Individuals may be transformed and acquire new knowledge and skills which have utility. They may acquire new values, aspirations and desires that provide the motivation to become socially mobile. Communities can benefit both from the enhanced capabilities of individuals, and from new ways of organising and supporting social action that depend on literacy and numeracy, new technologies of communication and abstract thinking skills. Production and service sector activities can be transformed with more knowledge-based processes and intelligent design.

[2] Simply put individual interests (e.g. in grazing common land for free, can lead to collectively undesirable outcomes (all the grazing is impoverished).

A second sense in which transitions are linked to EFA and the MDGs relates to the transitions that occur within education systems. There are many of these. Greatly increased enrolments at primary level challenge teachers and curriculum developers to develop learning materials and pedagogies that work well across the spectrum of cognitive capability and cultural contexts. Greatly expanded cohorts of children enrolled generate demand for large numbers of new teachers who have to be trained and supported with new methods and mechanisms. The transitions that occur between grades and particularly between cycles (lower and upper primary, primary and lower secondary etc.) have to be revisited when the flow of students increases several fold. Selection mechanisms into secondary, which identify a small number of academically able children, may no longer be fit-for-purpose as expanded cohorts reach the end of primary and seek selection to much small numbers of places in secondary schools. Historic practices which result in large numbers of repeaters occupying places in schools may become unsustainable, especially where there is little evidence of the benefits of such repetition. And the basis on which schools are financed may have to change substantially if participation is to include those form the poorest households. The high-cost-per-student systems that could be supported with low enrolment rates (especially at secondary level) cannot be expanded at affordable costs.

2.2 Background

It is perhaps not surprising that the theoretical basis for the MDGs and EFA is ambiguous. The EFA goals and MDGs were generated through a consensus building process at international meetings with many actors and competing agendas. It is one of the challenges for CREATE to explore different theoretical perspectives that link improved access to desirable development outcomes. Necessarily this is likely to involve some forays into the values, ideology and cultural contexts within which EFA is pursued. Without some consideration of the realities and nuances there is a risk that achieving EFA goals will remain precisely that - the goals will be achieved but development more broadly defined may not take place.

A brief historical review is helpful in orientating contemporary debate. The events that led to the Jomtien World Conference on Education for All Conference in 1990 were underpinned by a kind of "Washington Consensus", at least amongst the major sponsors[3], that development could be accelerated through investment in human capital, and that a new thrust to universalise primary education was needed. This was justified because: social rates of return on primary education were generally very positive (Psacharoupolos and Woodhall, 1985); education raised productivity, especially in agriculture (Lockheed et al 1980); the developmental externalities of schooling were substantial (lower infant mortality and morbidity, improved health and nutrition) (Cochrane, 1979; Cochrane et al, 1980); and that economic growth, and just possibly improved income distribution, political stability and better governance, would follow from raising the average educational level of the poor. The "East Asian Miracle" (World Bank, 1993), and the analyses that followed it, lent weight to the view that widely available access to education at the first level was one of the pre-conditions for rapid economic growth, at least in the export led Newly Industrialising Countries (NICs) of the Pacific Rim. The result, at least in development assistance, was a shift from a previous emphasis on higher level skill development in poor countries (secondary technical and vocational education, higher education investment) to a growing prioritisation of basic education as a vector for development that could be externally supported. Though this did not

[3] E.g The World Bank, UNICEF, UNDP, UNESCO and several bi-lateral agencies.

meet with the initial enthusiasm on the part of at least some governments, especially in Sub Saharan Africa (SSA), it gradually became a dominant orthodoxy.

Developments were shaped by the post colonial political events that changed the political economy of development. Most obviously experiments with socialist approaches to development in the 1960s and 1970s lost ground, partly as a result of their own failures to generate endogeneous development and reduce dependence, and partly as a result of the more global collapse of their metropolitan sponsors in the centrally planned economies in Eastern Europe, the Soviet Union, and in different ways, China. Neo-liberalism began to hold sway with strong messages about "getting prices right", the marketisation of different kinds of service delivery, privatisation, smaller rather than larger state bureaucracies, and more global integration into the world economy. Structural adjustment became a feature of external assistance where economic fundamentals developed unfavourable characteristics and generated unsustainable debt. This typically resulted in constraints on public expenditure and employment with consequences for educational service delivery. These were often in tension with views of development that continued to stress the importance of meeting basic needs which markets alone were unlikely to achieve, maintaining effective public services with many developmental externalities, and the continued promotion of approaches valuing growth with redistribution coupled with unease about the efficacy of trickledown images of poverty reduction. The broader concept of the human development approach has begun to replace more narrowly focused human capital development perspectives linked to rates of return and focused on economic growth.

New approaches since the Dakar Global Forum on Education for All in 2000 have given greater prominence to rights-based approaches to educational service provision for basic education. These place more stress on equitable access to reasonable quality primary schooling as a right that is widely denied to large proportions of the population of many developing countries. This is seen as unacceptable since both governments and development partners have obligations to deliver on commitments they have made in the UN Charter and Declaration of Human Rights to promote universal access to education. Debt relief and debt cancellation tied to investment in basic education has become a reality. Most recently development partners have made very substantial pledges to support countries that produce viable educational development plans through a variety of mechanisms including the Fast Track Initiative (FTI), and the G8 has made clear its intentions to transform the volumes and modalities of external assistance. Sector wide approaches (SWAps) are replacing project based external assistance in many poor countries and several are on track to receive general budget support backed by agreed plans to expand access. To date much of this external assistance has continued to be focused almost entirely on primary schooling. There are signs that over the next decade support will increase to post primary programmes (Lewin, 2007a).

Alongside these developments globalisation has become a new reality and is having an impact both on rights-based approaches to education and development (through e.g. the activities of international NGOs), and on educational practice and process (convergence in curricula and examining systems, advocacy of child centred pedagogies, cross national monitoring of achievement, introduction of capitation systems for school funding etc). Information on many aspects of educational development is much more widely available than in earlier periods and will become more so with the spread of information technology. Arguably external assistance programmes have become more homogeneous with the development of SWAps and general budget support reflecting genuine desires to replace project support with sectoral plans supported by several development partners. In developing educational plans that qualify for

external assistance various benchmarks and indicative frameworks now exist that generate convergence, at least at national level (Bruns et al, 2003). These tend more often than not to be normative (based on best practice, selective comparisons with "successful countries", and convenient rules of thumb), but are also formative and convergent. They run the risk of compressing complex system realities in ways that lead to convergence in policy and practice that may not always be fit for purpose.

The theoretical and developmental underpinning of EFA and the MDGs is a subject that research will address since an understanding of the political economy of access is essential to insights into and progress towards EFA. Some key questions and dilemmas need addressing if EFA and the MDGs are to be achieved and improved access to education is to be translated into poverty reduction, improved equity, and the growth that can sustain the costs of public services. An incomplete list includes the following.

First, though it is fairly obvious that increased productivity (which generates wealth) is associated with higher levels of knowledge and skill, how this equation translates in many low income economies remains largely unknown. This is both a problem of what kind of knowledge and skill (a curriculum, teaching and learning achievement problem); and what kind of productivity (in agriculture, in the informal sector, in the modern sector etc). For CREATE this translates into concerns about access to what? Access broadly defined has to encompass the extent to which educational participation is meaningful to those it is presumed to benefit, and at least some insight into whether it actually does have benefits. What stakeholders believe about efficacy and utility influences family and individual choices to invest in education, and decisions to persist through to higher levels. In all but the short term, what is believed will be mediated by the realities that lie behind the perceptions of beneficial outcomes.

It is easy to demonstrate in general that in every low income country the more educated have higher incomes, and that as a result improved educational access is poverty alleviating. How the relationships are changing with expanded access is unclear. Most obviously the high rates of return associated with primary schooling where it was relatively scarce are likely to be falling as labour markets saturate with primary school graduates. There is some evidence of concave rate of return curves developing whereby little additional benefit accrues to those who continue to attend for additional years until they reach a threshold of scarcity, or cross over from ineffective to more effective schools. At some level the pursuit of universal access to basic education becomes a demand as well as a supply issue. Retaining children in school depends on decisions that children and household make about benefits.

Second, achieving EFA and the MDGs indicated by universal enrolment is frequently seen as a problem on the margin of reaching the "last 20%" who remain unenrolled. This is an increasingly misleading picture of the problem. Those unenrolled who will never enrol in primary school are a small minority of those who are out of school. In most poor countries out of school children are overwhelmingly drawn from those who have enrolled but have subsequently dropped out before completion for many different reasons. Policy and interventions to reach out to populations that have no access to schooling is still needed (especially in fragile states and where populations cannot be served by conventional schooling). However this needs to be differentiated from the actions needed to recapture drop-outs who need to drop-in (to conventional schools or viable alternatives) if they are to complete a full cycle of basic education. CREATE has developed a model of Zones of Exclusion to assist with more nuanced analysis that unpacks some aspects of the school

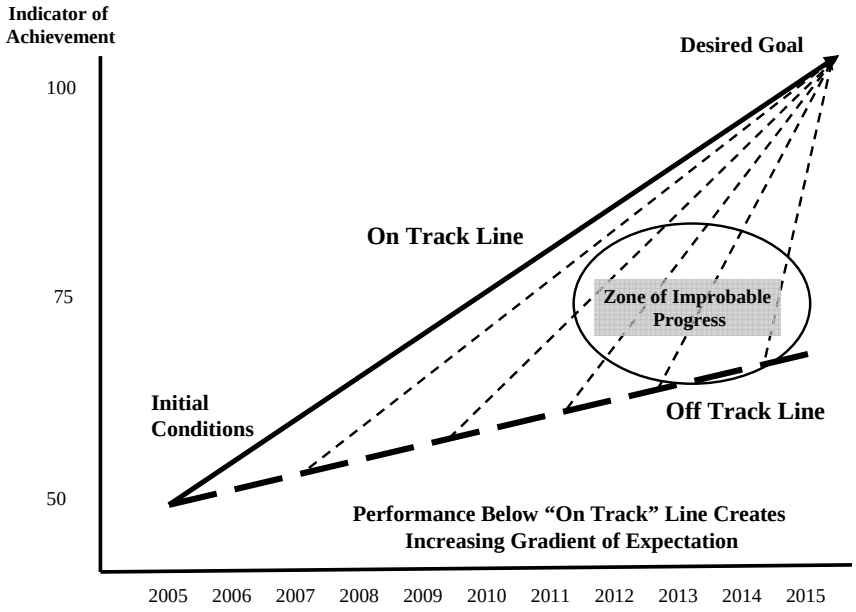
process as part of exclusion (see below).

Third, the indicators associated with EFA and MDG targets are important. These have focussed on Gross Enrolment Rates (GER) and Net Enrolment Rates (NER) and more recently primary completion rates. These are used to indicate progress and to release funds from external development partners. However, they are often poorly specified, may not be fit-for-purpose, and can give misleading signals (see discussions in UNESCO, 2003 on indicators; and Lewin, 2005). Generally targets and indicators are not contextualised or related to different starting points, realistic assessments of capacity, and recent rates of progress. This can result in increasingly unrealistic goals, unsustainable efforts to expand access at rates so high, quality degrades seriously, and steeply rising costs for marginal gains as thresholds are approached.

Part of the problem is that *aspirational planning* (Lewin, 2007b) sets goals in the future (e.g. NER = 100%, gender parity, 100% primary completion). Most projection models then draw back a pathway to the present which indicates what needs to be achieved each year to stay on track. The pathway is often linear. What often happens in practice is that financial (time slippage related to agreeing plans, signing off agreements, disbursing tranches of funding etc) and non financial constraints (lead times on construction, teacher training, softening of demand to enrol and progress etc) lead to under-achievement below the on track line. The gradient of what needs to be achieved then progressively steepens to the point where the planning and implementation system enters a Zone of Improbable Progress (ZIP) (Figure 1). Either the goals fall into disrepute because they are unachievable and there is no confidence in the modalities of making more and more rapid progress, or the goals are redefined and time shifted (as with the Dakar gender parity goal in 2005).

Target generating planning based on the estimates of the highest sustainable rate of expansion that does not degrade quality to unacceptable levels offers a better basis for operational plans and mobilizing assets efficiently and effectively might be a better approach (Lewin, 2007b). This depends on forward projections which draw attention to critical limitations of capacity, infrastructure and finance, and identifies forward commitments generated by present actions. It can also result in scenarios where the position in 2015 is not one of being on the steepest part of an S-Curve with no answer to what happens after 2015. Research on access needs to understand how goals can be converted into targets and how targets related to access can best be specified in ways meaningful to both target-setters and target-getters.

Figure 1 Gradients of achievement



Fourth, educational access is strongly determined by household income (Lewin, 2007c). The simple effects of wealth on access to primary schooling are generally decreasing since higher entry rates ensure that more and more can be enrolled. At higher grades drop out differentially effects the poor. Access to secondary schooling is very strongly household-income-related in all poor countries. Urban / rural differences in access can be striking, especially where most secondary provision is urban or peri-urban. Gender differences are almost always greater at secondary level than at primary. Access constrained by household income is clearly not equitable. Nominal access to very different qualities of schooling is also inequitable but more difficult to judge. Improved access generally requires both lower direct and indirect costs of schooling (no school fees, low cost learning materials, subsidies for poor students), such that the poor can persist, and diminutions in the variance of quality indicators between schools, at least at the level of inputs (teacher pupil ratios, learning materials etc.) It also requires balanced judgements and trade offs – flat rate subsidies can benefit the rich as well as the poor, gender differences in enrolment are mediated by household wealth.

Fifth, decentralisation is widely promoted as a mechanism that should enhance progress towards EFA and the MDGs. But this is not evidently the case. There are several issues. These include clarity about what is to be decentralised – school governance is very different from curriculum development or text book production, or selection examinations. Decentralised school financing may be attractive if capacity exists to manage funds, accountability and audit are effective, and formula funding or other mechanism can generate consistent and reliable disbursement. It may also fail to improve services where bottlenecks exist in disbursement, checks and balances are ineffective, and administrative capacity weak. Local authorities may or may not share national priorities and the micro politics of local power structures may be exclusive rather than inclusive. Access at the point of service delivery is a local issue, as well as being framed by national policy and resource availability. Thus research on access has to look both towards the local and the national.

Sixth, the role of non-state providers in achieving EFA and the MDGs remains a source of

debate, as it does with other forms of public service delivery (e.g. water, healthcare). It is clear that experience from other sectors cannot be directly mapped onto educational service provision not least because there are some critical differences in the nature of the services (Rose and Kadzamira, 2005; Lewin and Sayed, 2005). Both for profit and not for profit organisations have a role to play in expanding access. The former evidently serve elites relieving public education systems of the need to educate those who buy out into private schools. The latter often deliver services to the relatively poor but generally can only do so with subsidies from one source or another. Whether either have the capacity or the ambition and incentives to make a major impact on EFA in most poor countries is partly an empirical question. However, once the EFA principle of universal free primary schooling is accepted it is clear that fee charging private providers should only recruit those able to pay on an elective basis.

Truly private unsubsidised provision is unlikely to reach those in a one dollar-a-day poverty in most countries. Private organisations are unlikely to be the provider of last resort to the most marginalised. Well-managed grant aided NGOs and other organisations may have more scope and reach but it remains the case that most are small-scale and likely to remain so. At secondary level most secondary schooling in poor countries is fee paying. Even in public systems the bulk of the costs are privately supported from fees and other contributions. Various analyses demonstrate that full cost non-state schooling in low enrolment countries is unlikely to be affordable to those outside the top 20% of household income. This puts limits on the extent to which expanded access will be provided by non-state providers that are unsubsidised (Akyeampong, 2006; Lewin, 2007d). Access will benefit from multiple providers where these extend the reach of public systems and capture private finance from those who can afford to pay. The nature of the interaction between these providers and public provision is an important area of research, as is the extent to which they may contribute to EFA.

Seventh, several countries, most of which are in SSA (e.g. Nigeria, Tanzania, Uganda, and Zambia) have approached universal primary education in the past but have failed to sustain it (CEC/CREATE, 2007). History may repeat itself. The more obvious causes e.g. conflict and civil unrest, economic mismanagement and macro–economic failure, lack of sustained political will, have to be analysed along with the less obvious e.g. ineffective regional policies, discrimination against particular social groups, internal and cross border migration, lack of administrative capacity, the impact of HIV and AIDS, poor professional practice. Macro-level political, social, cultural and institutional conditions exist alongside economic realities. Together they frame the interaction of educational supply and demand at the individual, household, community and system levels. These macro factors are widely overlooked in relation to EFA policy and planning. They include, *inter alia*, livelihood conditions (e.g. Buchman and Brakewood, 2000); political climates (Little, 1999), institutional arrangements (e.g. Birdsall et al., 2005), cultural and religious affiliations (Daun, 2000) and gender issues (Colclough et al, 2003). Almost every EFA/MDG report calls for enhanced political leadership and commitment to the goals of EFA/MDGs. However, we know little about the conditions under which politicians see it to be in their interests to support EFA and go beyond the rhetoric of expanding basic education to act to improve access for the poor and disadvantaged.

3. Status Report on Access

3.1 Access

Progress in relation to the EFA Goals and the MDGs is reviewed annually in the Global Monitoring Report (GMR). This has developed since 2001 to include a range of indicators which capture enrolment rates, completion rates, volumes of external assistance to basic education and a number of other dimensions. The GMR (UNESCO, 2005) indicates that 47 out of 163 countries worldwide had universalised primary education by 2002. On their estimates a further 20 countries may succeed by 2015, and further 20 are considered at risk of not achieving the goal but probably will succeed. A further 47 countries either have a low chance of achieving the goal or are judged to be very unlikely to succeed. About half of these are in SSA.

Recent estimates suggest there are about 108 million primary age children in Sub Saharan Africa of whom about 91 million are nominally enrolled. At secondary level there are 92 million children and about 25 million enrolled[4]. This means that at a minimum 17 million children of primary school age and 67 million of secondary school age, are out of school. In South Asia about 151 million children are in primary schools, out of a total of about 160 million in the age group. At secondary level only 97 million are enrolled out of about 206 million.

In reality the numbers excluded are much greater since enrolment figures include large numbers of over age pupils and repeaters. Enrolment estimates also fail to capture those who may be registered but not attending. Reliable estimates of those not attending school across SSA are not available. It is reasonable to conclude that more than 25 million in the primary age group and 75 million of secondary age are excluded either by being unenrolled or being nominally enrolled but not attending. In South Asia the numbers can be estimated as at least 15 million at primary and 120 million at secondary level. Neither of these estimates includes those "silently excluded" (i.e. enrolled and attending, but learning little).

Table 1 shows numbers of out-of-school children by country in SSA. The Democratic Republic of Congo, Ethiopia, Tanzania, Burkina Faso, and Niger all have more than a million children not enrolled in primary school on these estimates. These countries account for nearly 70% of the total unenrolled[5] in SSA. This indicates that numerically the problem of access in SSA and achieving the MDGs, is skewed towards a few countries. These are amongst the poorest in SSA with average GDP per capita of about 300 USD. The countries towards the lower part of Table 1 appear to have a surplus of primary school places over the number of primary school age children and thus Gross Enrolment Rates over 100%. This arises because of over age enrolment and repetition. It does not mean that all school age children in these countries are actually enrolled.

Table 2 shows the situation in South Asia[6]. Here most out-of-school children at primary level are in Pakistan and India, and at secondary level in Bangladesh also. Though Pakistan on these estimates has more primary children unenrolled than India, at secondary level, India has far more unenrolled than any other country.

[4] UNESCO Institute of Statistics data 2005 relating to 2002
[5] Considering only those countries where the age group is larger than the number enrolled
[6] This underestimates those unenrolled since it compares enrolments at all ages with the age group.

The average[7] Gross Enrolment Rate for Primary (GER1) for SSA is now about 93%. Secondary gross enrolment rates (GER2) average about 25% overall and about 40% at lower secondary[8]. In South Asia GER1 averages 104% and GER2, 52%. Countries which have high values of GER1 and GER2 have little immediate need to increase the quantity of schooling to enhance enrolment rates but often have problems of the distribution access, quality and learning achievement.

Those with the lowest enrolment rates are characteristically poorer with typically more than half of all households existing on less than a dollar a day and as many as 80% on less than two dollars a day. EFA and the MDGs effectively commit States to universal free primary education implying that fee paying at this level is elective for those who can afford to pay, not a method for expanding access to the poorest. Most SSA countries retain fee paying secondary schooling in which participation is heavily influenced by household income. Secondary enrolment rates are clearly lowest in the poorest countries. Richer SSA countries with higher enrolment rates (e.g. Namibia, Botswana, South Africa) all have predominantly public provision at primary and secondary level with a small private sector largely addressing the needs of the relatively wealthy. In South Asia high enrolment rates are found in parts of India and in Sri Lanka despite low levels of GDP per capita, but not in Pakistan and some other Indian States.

[7] Unweighted average of available data
[8] Unweighted average of available data

Table 1 Sub Saharan Africa – primary and secondary age group, enrolments (‘000) and numbers unenrolled

	Primary age group	Enrolled	Difference	Secondary age group	Enrolled	Difference
D.R. Congo	8518	4012	4506	7322	1464	5858
Ethiopia	11285	7213	4072	9440	1786	7655
U R Tanzania	6979	4845	2134	5086	323	4763
B. Faso	2127	927	1200	2062	218	1844
Niger	1900	761	1139	1783	124	1659
Mali	2151	1227	924	1801	312	1490
Nigeria	20093	19385	708	17328	6313	11014
Ghana	3177	2586	591	2979	1151	1828
Côte d'Ivoire	2635	2116	519	2891	620	2271
Zambia	2063	1626	437	1261	345	916
Senegal	1590	1197	393	1601	306	1295
Angola	1512	1125	387	2241	242	1999
Chad	1385	1016	369	1316	188	1128
Burundi	1151	817	334	1183	119	1063
Guinea	1294	998	296	1289	301	988
Kenya	6074	5828	246	4222	1362	2860
Eritrea	546	330	216	575	159	415
CAR	621	411	210	617	66	551
Sierra Leone	729	554	175	590	134	455
Congo	614	525	89	589	164	424
G-Bissau	230	150	80	149	26	124
Gambia	204	161	43	176	60	117
Mozambique	2585	2556	29	3128	476	2652
Liberia	524	496	28	401	85	316
Zimbabwe	2561	2535	26	2057	828	1229
Comoros	116	104	12	124	38	85
Seychelles	11	10	0	7	8	-1
Swaziland	211	212	-1	138	62	77
S T+Principe	23	29	-6	19	7	11
Mauritius	126	134	-8	138	100	38
Botswana	319	329	-10	218	153	65
Eq. Guinea	62	78	-16	71	20	52
Cape Verde	73	90	-17	71	48	23
Namibia	376	398	-22	221	138	83
Benin	1107	1153	-46	1131	284	848
Gabon	210	282	-72	212	105	107
Lesotho	334	415	-81	237	81	156
Madagascar	2311	2408	-97	2721	436	2284
Cameroon	2570	2742	-172	2627	669	1958
Togo	787	978	-191	782	335	447
Rwanda	1312	1535	-223	1174	167	1007
South Africa	7052	7413	-361	4917	4109	808
Malawi	1952	2846	-894	1000	176	824
Uganda	5059	6901	-1842	3487	656	2831

Source: UIS 2005 based on 2002 data

Table 2 South Asia – primary and secondary age group, enrolments ('000) and numbers unenrolled

	Primary Age Group	Enrolled	Difference	Secondary Age Group	Enrolled	Difference
Pakistan	20,210	14,562	5,648	24,855	5,790	19,065
India	116,032	113,883	2,149	151,602	76,216	75,386
Bangladesh	18,106	17,659	447	22,805	10,691	12,114
Bhutan	134	88	46	58	26	32
Maldives	57	71	-14	37	25	12
Sri Lanka	1,597	1,763	-166	2,760	2,229	531
Nepal	3,168	3,854	-686	3,853	1,690	2,163

Source: UIS 2005 based on 2002 data

As far as gender equity is concerned, 49 countries had achieved gender equity at primary and secondary level in 2002 and 14 were considered likely to do so by 2015. 79 countries were considered at risk of not achieving parity in enrolments by 2015, 43 of which are likely to fail because of inequity at secondary level, and 24 at both primary and secondary level. The majority of those likely to fail only at secondary level have more girls than boys enrolled; in contrast the majority of those likely to fail at both levels have more boys than girls enrolled. Most of these are in SSA. At primary level in SSA 58% of countries have differences between boys and girls which are smaller than 6%. In most cases these favour boys but in a minority of cases they favour girls. At secondary level, 71% of countries are outside this range. In 18% of the cases the difference favours girls. These however, are high enrolment countries.

Gender equity measured by the Gender Parity Index (GPI) at primary and secondary varies considerably across countries. The GPI is more favourable to girls at primary than at secondary in all but six countries in SSA (Figure 2). These six are higher enrolment countries and/or those with special circumstances. In South Asia three countries have more boys than girls enrolled at secondary (Figure 3).

In general GPI 1 (gender parity at primary) is more favourable to girls than GPI 2 (gender parity at secondary school). Only where GPI 1 is high is it likely that GPI 2 will reach or exceeds parity. GPI 1 at primary is not correlated with GPI 2 at secondary very strongly, suggesting there is a large element of policy choice in the differences. If gender equity at primary and secondary is the goal (i.e. MDG 3), then the larger differences at secondary need to be addressed.

Figure 2 GPI 1 (primary) and GPI 2 (secondary) by country in SSA

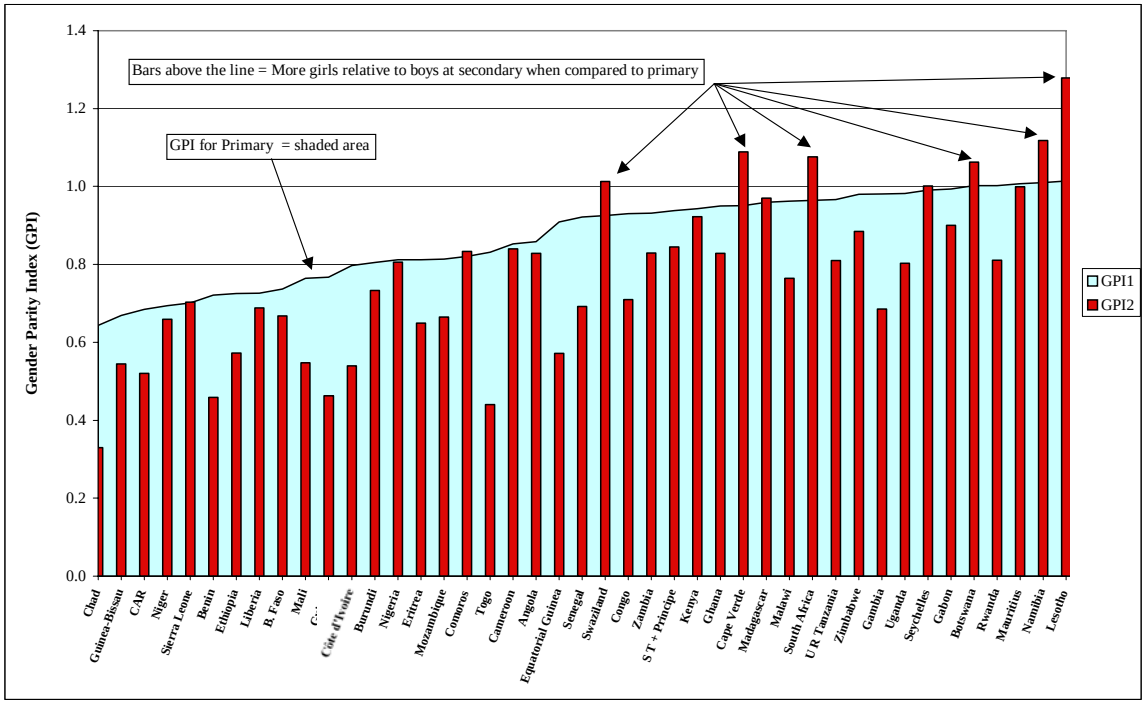
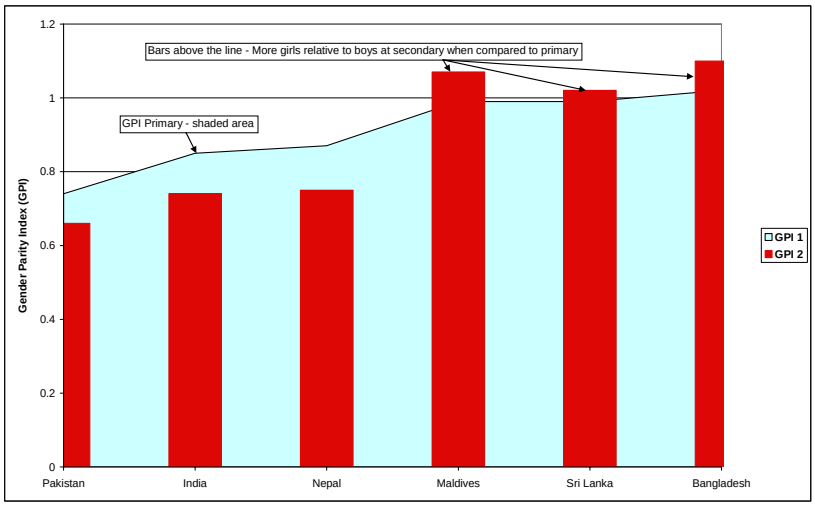
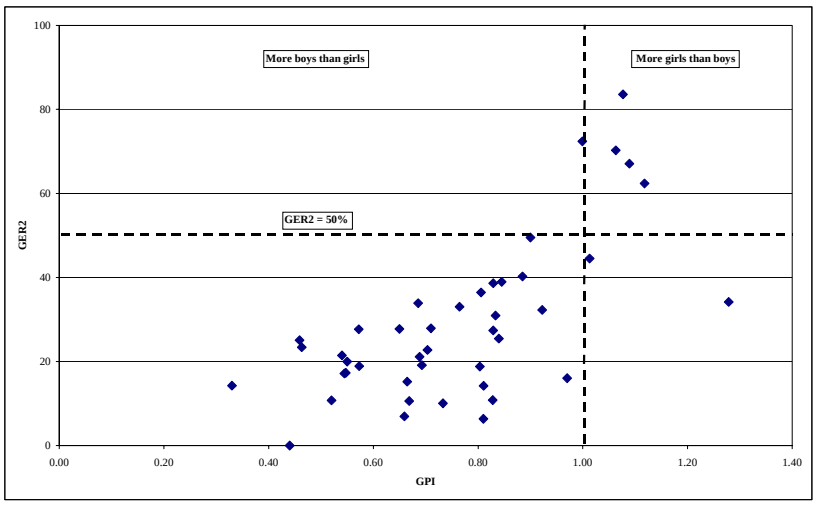


Figure 3 GPI 1 (primary) and GPI 2 (secondary) by country in South Asia



In general very few countries in SSA achieve gender equity at secondary with GER2 below 50%. The ones that do are those with special circumstances (e.g. Lesotho and Swaziland). All those with GER2 over 50% have more girls than boys enrolled at secondary (Figure 4). This suggests the importance of raising overall enrolment rates. Gendered enrolment patterns have different characteristics in different countries. It follows that efforts to achieve gender parity at primary and secondary should have different trajectories (Lewin, 2007c).

Figure 4 GER2 by Gender Parity Index (GPI)



3.2 Enrolment patterns

Figure 5 on the next page, derived from Demographic and Health Survey data, shows how access at different levels is strongly related to household income in SSA. Similar variations in patterns exist in South Asia below national level.

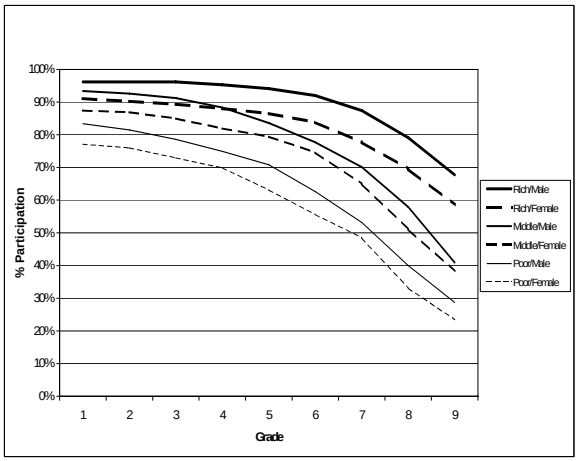
Households in these data sets are divided into the richest 20%, and the middle and poorest 40%. Children from the richest 20% of households have on average more than 11 times the chance of reaching grade 9 than those from the poorest 40% of households[9]. Gender is less important in explaining differences in enrolment amongst the richest 20% where boys are more likely to be enrolled in the ratio of 53% to 47%. Amongst the poorest 40% the ratio boys/girls is 79:21 for participation at grade 9 on average across the data set. Gender differences tend to diminish for higher grades of attendance. Urban children have about 10 times more chance of being enrolled in grade 9 than rural children in the data set.

There are very different patterns of participation by wealth and gender between countries. In Ghana differences related to wealth are relatively small throughout the primary grades, as are those for gender. Attrition accelerates in the secondary grades and differences increase. In Uganda poor girls seem more disadvantaged than other groups, and wealth differences appear more important than in Ghana, especially at higher grade levels. In Mozambique there are large differences in participation linked to household income from grade 1, and large differences related to gender. Attrition is high throughout the primary grades. In Tanzania rich girls out-enrol rich boys but the opposite is true of poor girls. The effects of low transition into secondary grades are very striking. In Rwanda differences in participation between boys and girls are relatively small and remain fairly constant across grade levels and often favour girls. Wealth is a less important determinant of enrolment than in many other countries. In Zambia, though wealth is relatively unimportant in grade 1, it becomes much more so in the higher grades of primary and in secondary. Girls and boys are enrolled in nearly equal numbers.

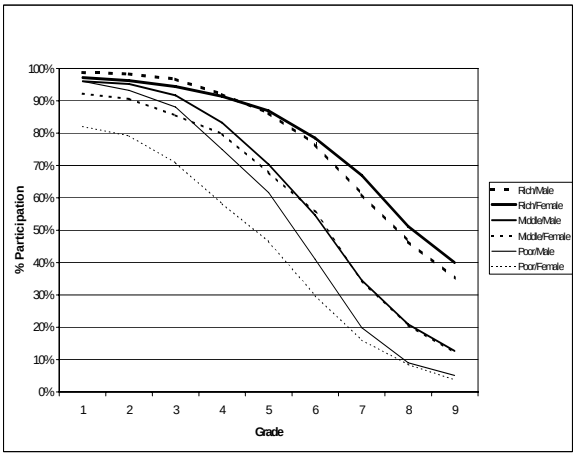
[9] Based on median values across the 26 countries in the data set for highest level of participation amongst 15-19 year olds.

Figure 5 Participation by wealth and gender in SSA

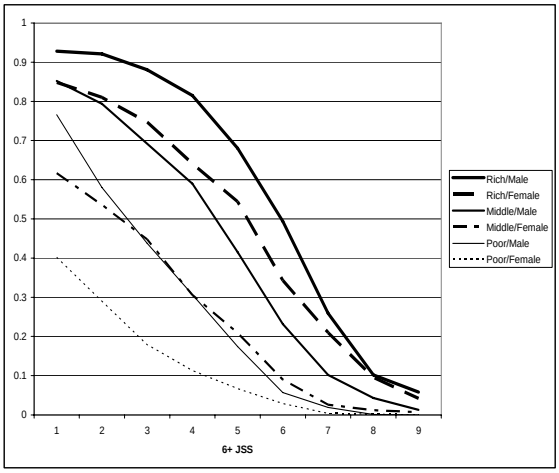
Ghana – participation by wealth and gender



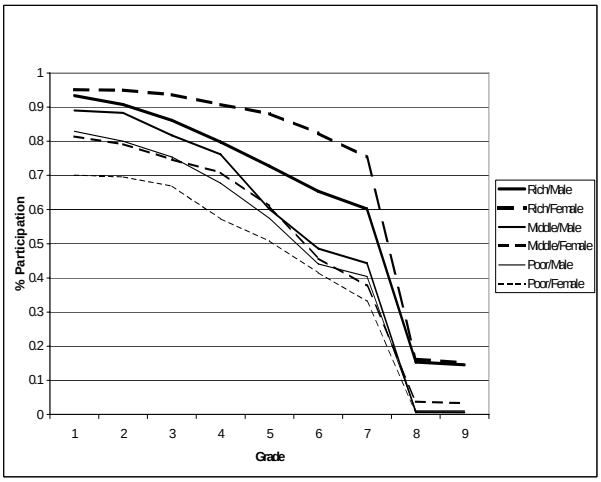
Uganda - participation by wealth and gender



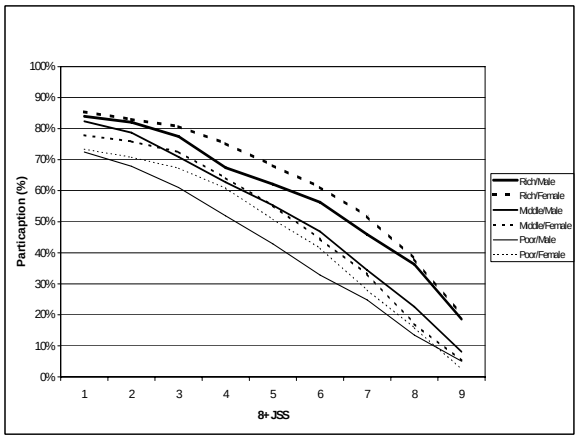
Mozambique – participation by wealth and gender



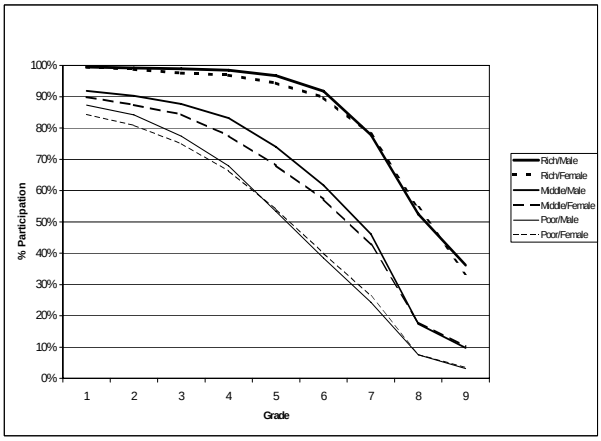
Tanzania – participation by wealth and gender



Rwanda - participation by wealth and gender



Zambia – participation by wealth and gender



The different patterns, and their causes, are very important to understand since they define starting points against which to progress towards greater equity. In some cases gender differences are embedded at every grade level, in others the differences are minimal. In all cases household wealth is a significant determinant of participation and is generally more important than gender.

Strategy to expand access to both primary and secondary depends on the nature of participation and the causes of exclusion which differ between countries. The participation profiles and other data indicate that in some cases primary drop out and completion remains a critical problem despite increasing gross enrolment rates. In others primary/secondary transition is a striking problem. Household income is especially important at secondary level since fee paying is common and often exceeds the ability to pay of those below the 20th percentile of household income.

It is also important to note that school-age population growth rates vary from minus 1% to over 5% p.a. in low enrolment countries. In the latter, the number of children will double in less than 15 years. The proportion of school-age children in the total population varies from under 20% to over 40%. The average is over 30%. In many cases the dependency ratio of children to working age adults will be over 60% and may approach 100%. This limits the extent to which domestic revenue from working age adults can be available to support the costs of schooling either through the tax base or through cost recovery. This generates major problems for the financing of improved access. When population growth is coupled with expansion needed to universalise access primary school systems may have to double or triple in size by 2015 in the most challenging cases. At secondary level universal enrolment may require five to ten times as many places and is beyond reach at affordable costs in the lowest enrolment countries.

Strategies for expanding access depend on existing patterns of participation and the rate of progress towards target levels of enrolment. Analysis of data from 44 SSA countries[10] suggests that there are five broad groups in terms of existing patterns of access (Lewin 2007a). These are those with:

1. High participation in primary and secondary level, with low rates of repetition and drop out
2. Very high initial enrolment rates in primary schooling, but high drop out and repetition with low completion rates, and falling transition rates into secondary school, and low participation at secondary
3. High primary entry rates and mid levels of repetition, drop out and completion, with mid range secondary participation
4. Primary schooling entry rates below universal levels, and low primary and secondary enrolment rates and
5. Very low primary entry rates and very low participation though primary and secondary school.

Because very different enrolment patterns exist between SSA countries a typology is needed that identifies characteristic patterns that will determine policy choices. A data set was

[10] This analysis cannot be meaningfully undertaken on South Asian countries since there are so few to analyses and the countries are widely disparate in size. Aggregate data on India conceals such diversity that it requires a separate analysis of patterns.

constructed using grade by grade enrolments for each country[11]. Five groups of countries emerged. The index of participation[12] is an estimate of grade by grade Gross Enrolment Rates. A consolidation of these patterns is illustrated in Figure 6 and a full version is available in Lewin (2007b).

Countries in Group 1 have high participation rates through to upper secondary with low attrition. On average the index of participation is close to 100% in grade 1 and only falls to 75% by grade 9. GER1 is between 95% and 115% with enrolment patterns suggesting low levels of over age enrolment. Seychelles, South Africa, Botswana, Mauritius, Namibia, Zimbabwe and Swaziland fall into this group.

Group 2 countries have a very different pattern. Here initial enrolment rates are very high with participation rates in grade 1 which can exceed 200%. GER1 varies from 100% to 140%. Attrition is steep and participation falls to about 20% by grade 9. In these systems primary has been expanded rapidly but completion rates are low and very small numbers enter lower secondary. Upper secondary enrolment is small. These countries include Uganda, Rwanda, Equatorial Guinea, Malawi, Madagascar, Mozambique and Tanzania[13].

Group 3 countries have a participation rate in grade 1 of about 150% and overall GER1 rates of 108% to 126%. Attrition is lower than in Group 2 with more surviving to grade 9 where the participation rate is about 35%. The Group includes Togo, Lesotho, Sao Tome and Principe, Nigeria, Benin and Cameroon.

Group 4 countries have lower values for participation in grade 1. These are below 100% (fewer enrolled in grade 1 than there are in the relevant age group). The participation rate falls more rapidly than for Group 3 to about 25% by grade 9. GER1 is between 78% and 92% indicating that many do not complete the full cycle of primary school. This group includes Gambia, Zambia, Kenya, Comoros, Congo, Ghana, and Cote d'Ivoire.

Group 5 countries all have low entry levels and low participation through to grade 9. GER1 varies from 44% to 84%. These are all countries which have low or very low rates of participation at secondary. They have low rates of attrition but this is because few are enrolled. Unlike Group 2 countries their entry rates are well below levels necessary to universalise primary. This group includes Guinea, Eritrea, Ethiopia, Senegal, Mali, Guinea-Bissau, Burundi, Chad, Burkina-Faso and Niger.

It is possible that Group 2 countries will become more like Group 3 countries as repetition and drop out through primary fall. Group 3 countries may become more like Group 1 as secondary participation increases. This is what should happen if progress continues to be made towards EFA. Critically, countries in Groups 4 and 5 may come to resemble those in Group 2, with considerable over enrolment in grade 1 and high repetition and drop out through the primary grades. Until more reach the end of primary successfully secondary expansion will be limited by the supply of qualified primary leavers. There are many possible patterns of evolution, some of which are likely to be more efficient and effective than others.

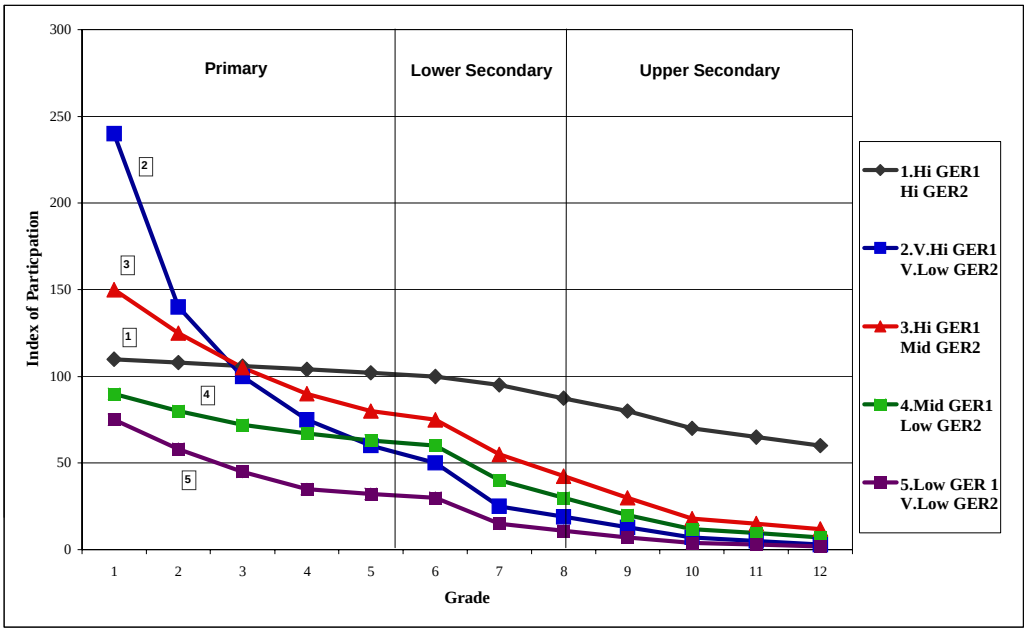
[11] These were available for 38 countries

[12] The index of participation is based on the numbers enrolled in grade 1 compared with the number of children in the grade 1 age group for that year and for subsequent years. It therefore approximates a grade by grade enrolment rate.

[13] Malawi falls in this high attrition group since its participation rates at secondary are low; Uganda does also. In both cases it is likely private enrolments are under counted.

These patterns suggest very different challenges for improved access in different countries and suggest that these systemic aspects of access, and understanding of the dynamics of transition from one pattern to another, are important for planning gains in participation. The patterns themselves are aggregates that conceal large in-country variations. These can only be explored with national data sets. This way of illustrating access issues draws attention to how different starting points are between countries, and how different the challenges are likely to be.

Figure 6 Generic chart of enrolment patterns



Some broad observations for improved access are that actions may be needed that:

1. Reduce excessive enrolment in grade 1 followed by rapid subsequent drop-out in countries where EFA programmes have generated these patterns
2. Balance progress on universalising access and completion in primary with needs to increase lower secondary participation
3. Recognise the interactions between primary and secondary expansion (especially in teacher supply and transition rates)
4. Link enrolment growth to curriculum reforms that recognise the changing needs of new students, especially at secondary level
5. Adopt a differentiated approach to reducing gender differences depending on starting points and the factors responsible for the differences
6. Identify sustainable frameworks to provide financial resources and overcome non financial constraints on growth.

4. Re-conceptualising Access

4.1 Introduction

The key issue CREATE is addressing is how to increase meaningful access for girls and boys between the ages of 5 to 15 years. The numbers are large. Even where primary gross enrolment rates exceed 100%, national data indicates that attendance may be below 70%, completion rates may fall below 50%, and fewer than 20% may attend lower secondary schooling. Achievement data often show a minority acquiring basic learning skills by grade 5 or 6, e.g. Southern African Consortium for the Measurement of Educational Quality (SACMEQ[14]). The EFA Global Monitoring Reports (UNESCO, 2002-2006), Education Watch in Bangladesh (e.g. Ahmed and Nath, 2005), national EFA reviews in India (e.g. Govinda, 2002) and studies in other countries indicate the scale of the challenge, and its changing characteristics in urban and rural areas.

Initial enrolment and progression are a result of the interaction of both supply and demand. In many EFA programmes access is presented as a supply side issue that can be resolved if enough school places are provided. This was always insufficient to achieve schooling for all (Colclough with Lewin, 1993). The supply and quality of school places remains important for those initially excluded, and for those learning under conditions which compromise successful achievement. Critical supply-side issues include school location, teacher deployment and training, availability of learning materials, and safety especially for girls (see e.g. Dunne, Leach et al, 2005; Lewin and Stuart, 2003; Colclough et al, 2003). However, expanded enrolments resulting from the increase in numbers of schools and teachers, have not always been accompanied by falling rates of repetition and drop out. Thus in Malawi the number of primary school completers has remained static over ten years despite an overall increase in enrolments of 60%. Demand may soften as enrolment rates rise, especially amongst older children.

Patterns of demand shape entry, progression, completion and transition to lower secondary and are often gendered. Rapidly expanding enrolments have been associated with changing perceptions of the relevance and effectiveness of schooling, and of the benefits of participation (Lewin and Caillods, 2001). The problems of reaching out to those who never attend school, and increasing promotion, completion of primary and transition to lower secondary, are inextricably linked to decisions to participate. These are partly related to the direct costs of schooling but are also dependent on many other factors. Both ‘determinants analysis’ and ‘family strategies’ can be used to explore these (Laugharn, 2001), and need to include consideration of women’s household economic activity (Rose and Al-Samarrai, 2001). Thus, how demand has been changing, and how supply interacts with demand, are central issues in exploring increased access.

[14] See: http://www.sacmeq.org/

Exclusion from basic education is a process culminating in an event with multiple causalities. CREATE uses the term 'zones of vulnerability' to describe the various spaces where children are included, excluded, or are at risk. Initial access has little meaning unless it results in:

1. Secure enrolment and regular attendance;
2. Progression through grades at appropriate ages;
3. Meaningful learning which has utility;
4. Reasonable chances of transition to lower secondary grades, especially where these are within the basic education cycle.
5. More rather than less equitable opportunities to learn for children from poorer households, especially girls, with less variation in quality between schools

CREATE therefore takes a broad view of access that includes these five aspects. Full access is not secured unless enrolment is linked to high attendance rates and time on task, progression occurs with little or no repetition, indicators of learning outcomes confirm that basic skills are being mastered, and most if not all have opportunities to enter and complete lower secondary schooling. In addition some consideration must be given to equity. Full enrolment may conceal very large difference between schools and the public resources available per child to support learning. Equitable access implies that the variance between schools on key indicators (e.g. pupil-teacher ratio, cost per child, measured performance on basic learning outcomes) should fall within a narrow, rather than broad range.

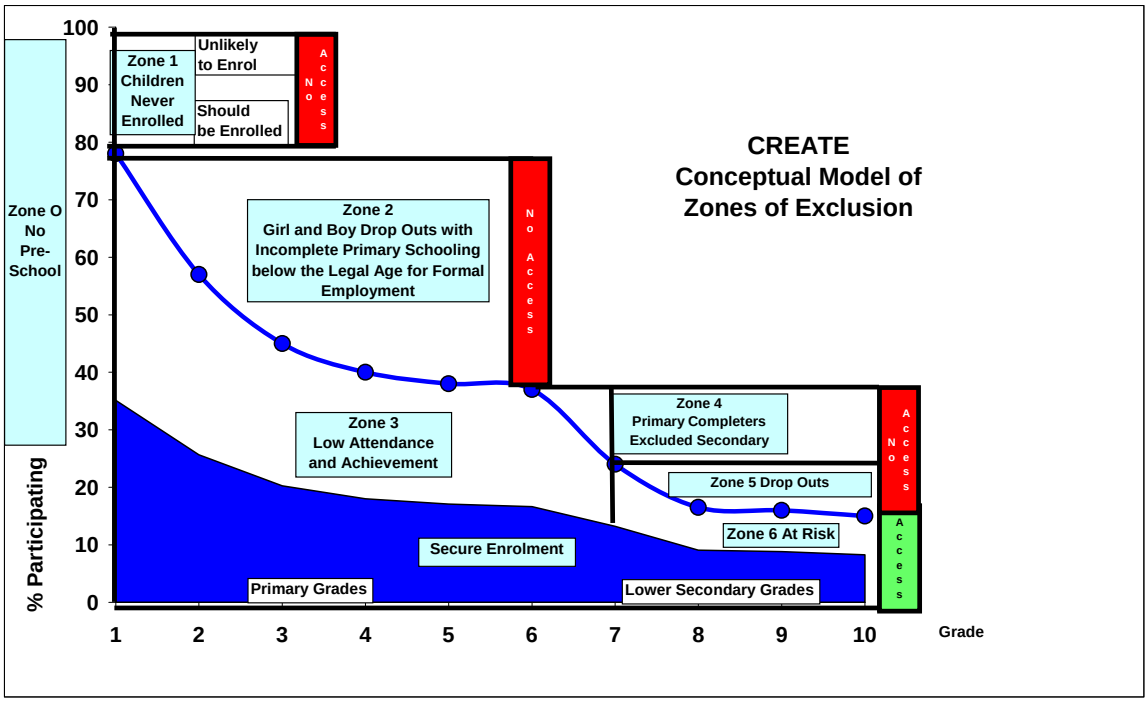
It is important to retain this elaborated definition of access in developing policy dialogue. Existing EFA indicators capture some but not all of these aspects of access (Lewin, 2005). From this understanding of access it is clear that neither Gross nor Net Enrolment Rates (GERs and NERs) are sufficient to indicate progress. Completion rates, another widely used indicator are also insufficient both because of the difficulties of calculating them and because completion may occur at any age and often without any criterion referenced level of achievement (Lewin, 2005).

4.2 The CREATE Zones of Exclusion

CREATE identifies six zones of exclusion[15]. Figure 7 presents a cross sectional model by grade of participation which locates those who are losing or have lost access to conventional education systems. It illustrates how typically enrolments decline steeply through the primary grades in low enrolment countries, and how those attending irregularly and achieving poorly fall into "at risk" zones. In this hypothetical model more than half of all children leave before completing primary school, and about half of the primary completers are selected into lower secondary school where attrition continues.

[15] Seven if pre school is included

Figure 7 Access and zones of exclusion from primary and secondary schooling



Zone 1 contains those denied any access. Expansion of conventional schooling can enrol a proportion of these children, but is unlikely to embrace all by 2015. More research is needed of the circumstances that surround those without access to orthodox schooling, for example, nomadic groups (Aikman and el Haj, 2005); those in low population density areas (Little, 2006); and those in extreme poverty (Kabeer et al., 2003), to establish how their basic education needs might best be met. This additional research could identify whether different modes of service delivery offer promise (Chowdury et al, 2003), and whether opportunities to join mainstream schooling will be sufficient to extend access to all. It is likely that the best solution for most of those currently excluded from grade 1 is extending the reach of the existing formal system. Analysis is needed of the gaps in provision (both rural and urban) and of feasible, pro-poor and affordable strategies. These should recognise the growing attention being given to pre-school.

Zone 2 includes the great majority of children who are excluded *after* initial entry. Typically, drop out is greatest in the early grades, with a substantial subsequent push-out at the transition to secondary school. Pre-cursors to drop out include repetition, low achievement, previous temporary withdrawals, low attendance, late enrolment, poor teaching, degraded facilities, very large classes, household poverty, child labour and poor health and nutrition (Boyle et al., 2002; Canagarajah and Nielsen, 1999; Fentiman, Hall and Bundy, 1999; Nokes et al, 1998). Those dropping out usually become permanently excluded with no pathway back to re-enter. The zone includes disproportionate numbers of girls, HIV/AIDS orphans, and others in vulnerable circumstances (Pridmore et al, 2005). It may be influenced by child labour practices (Ravallion and Wodon, 1999).

Zone 3 includes those in school but at risk of dropping out. These children might be low-attenders, repeaters and low-achievers. Children who remain formally enrolled in school may

be silently excluded if their attendance is sporadic, their achievement so low that they cannot follow the curriculum, or if they are discriminated against for socio-cultural reasons. Nutritional deficiencies and sickness can compound these problems (Partnership for Child Development, 1998). Too little is known of how the range of influential factors is changing as EFA evolves, how they result in decisions to enrol and attend at different grade/age levels, and how they have an impact on different key disadvantaged groups.

Zone 4 contains those excluded from lower secondary school as a result of failing to be selected, being unable to afford costs, or dropping out before successful completion of primary. This exclusion is important for EFA since transition rates into secondary affect demand for primary schooling, primary teacher supply depends on secondary graduates, and gender equity at the secondary level is an MDG. Access to secondary schooling promotes the social mobility needed to give poor households more access to higher income employment.

Zone 5 includes those children who have entered lower secondary school but who fail to progress to the end of the cycle. In most countries lower secondary is now considered part of basic education. Many who fail to complete the cycle are likely to be below the legal working-age if they are in the appropriate grade for their age. The reasons for drop out include poor performance, affordability, and loss of interest. Demand to remain in school may weaken as a result of high opportunity costs where work is available.

Zone 6 contains lower secondary children at risk of drop out. As with Zone 3 some will be silently excluded though enrolled and at risk as a result of poor attendance and low achievement. Costs and affordability are also likely to be significant.

Zone 0 refers to pre school participation. This is very poorly detailed though it is clear that in low enrolment countries large majorities experience little or no access to organised pre-school, and those that do are often enrolled in high cost private facilities. This almost certainly disadvantages this population in relation to those that do attend preschool and achieve a head start in basic learning. Several countries are developing policy to extend the reach of pre-schooling and provide public finance to support its development (e.g. Ghana and South Africa).

In summary the CREATE Zones are:

CREATE Zones of Exclusion

0. Zone 0 – children who are excluded from pre-schooling
1. Zone 1 -children who have never been to school, and are unlikely to attend school;
2. Zone 2 - children who enter primary schooling, but who drop out before completing the primary cycle
3. Zone 3 - children who enter primary schooling and are enrolled but are "at risk" of dropping out before completion as a result of irregular attendance, low achievement, and silent exclusion from worthwhile learning
4. Zone 4 – children who fail to make the transition to secondary school grades
5. Zone 5 children who enter secondary schooling but who drop out before completing the cycle
6. Zone 6 children who enter secondary schooling and are enrolled but are "at risk" of dropping out before completion as a result of irregular attendance, low achievement and silent exclusion from worthwhile learning

This way of conceptualisation of access draws attention to several important general issues.

First, it is generally the case that those who are not enrolled and who will never enrol (Zone 1) are the minority of those out of school, often by a factor of five or more. The exceptions may be in fragile states and in remote areas where conventional schools are unable to operate. By far the largest numbers of school age children who are out of school have enrolled at some time but have failed to persist (Zone 2 and Zone 4). Moreover it is likely that most who are unenrolled are in households where some siblings have enrolled and may still be enrolled. The empirical test of this has to be undertaken using household survey and other data from different locations. However the general patterns are clear.

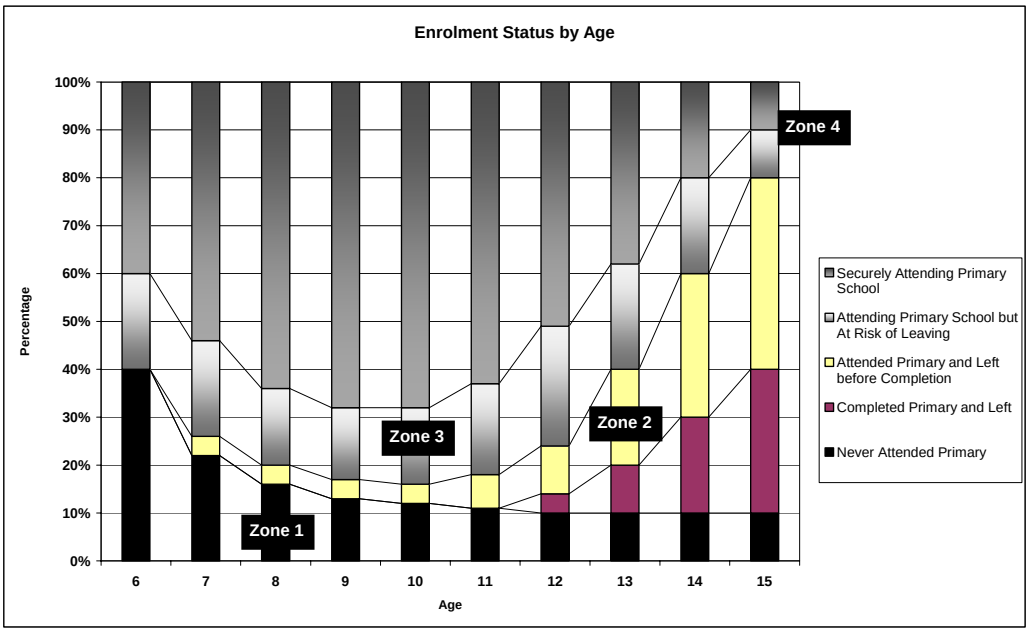
Second, children in Zone 3 and Zone 6 are judged to be at risk of drop out. The easiest way of identifying such children is likely to be through patterns of attendance and of low achievement. The former is readily observable. Thresholds can be identified below which meaningful access is compromised if not entirely lost. An arbitrary threshold could be 90% attendance throughout the school year. Less than this signifies substantial loss of time on task and is likely to lead to low achievement and failure to be promoted. The latter is more complex in the absence of criterion referenced performance data. Low achievement in one school may be judged high in another. Drop out may be more influenced by relative rather than absolute levels of performance since it is partly socially-determined. Those who drop out are not always low achievers. Nevertheless, low achievement leading to slow progression, failure on promotion tests and repetition does seem likely to be exclusionary. The "silent exclusion" of children attending but learning little is a useful concept but it can only be judged in context on the basis of the data available. Children who are at risk of drop out at levels that almost guarantee that they will not complete primary school successfully, should be included in those whose access is compromised. Their access is unlikely to be very meaningful if they

learn little and then leave.

Third, the transition from primary to lower secondary is a significant point of exclusion for large numbers where secondary school places are a small fraction of the number of primary school leavers. Selection ratios in parts of Sub-Saharan Africa have exceeded 5:1. In many countries with EFA programmes secondary schooling has not expanded as fast as primary with the result that transition rates may have fallen. Access to lower secondary is part of EFA both because basic education often includes these grades, and because the gender equity targets explicitly include secondary schools[16]. The issues in Zones 4, 5 and 6 have similarities with Zones 2 and 3 but also have different characteristics. These include formal selection (many countries have a selective primary school leaving examination) to allocate places in secondary schools competitively, typically much higher costs to households of attendance than at primary, and the inclusion of children of labour market age in school enrolment. Access in these zones is more likely to be subject to demand side constraints arising from opportunity costs, loss of interest in schooling, early marriage, pregnancy etc. than at primary.

Fourth, the model of Zones of Exclusion by grade has to be accompanied by an understanding of progression through grades linked to age and repetition patterns. Figure 8 shows how enrolment varies in relation to age in low enrolment countries. This generic model is based on patterns that can be seen in household survey data and EMIS.

Figure 8 Access and age patterns



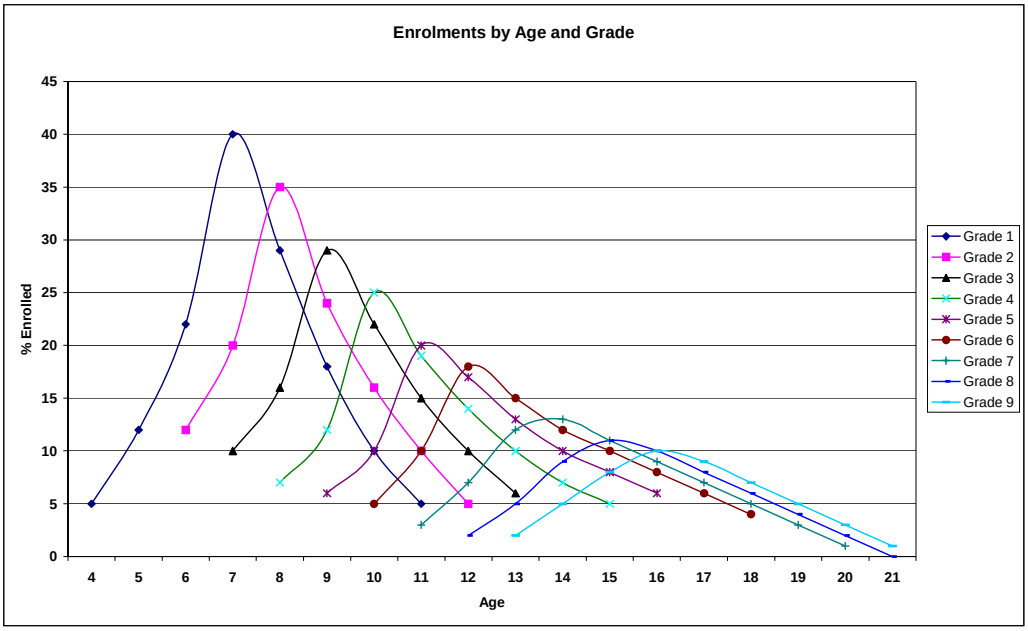
In this illustration about 40% of six year olds are not enrolled. The proportion who remain out of school falls to about 10% by the age of eleven. Above this age it is likely that those who are out of school will remain excluded. Primary enrolment rates by age group increase to age eleven and then start to fall as a result of early drop out in lower and middle grades before completion. The chart distinguishes between those who are securely enrolled (i.e. unlikely to drop out before completion) and those who are "at risk" (in Zone 3 of the CREATE exclusion

[16] In both EFA Dakar Goals and the MDGs secondary is not separated into lower and upper

model). From age 12 onwards increasing numbers complete the primary school cycle and either leave formal education or continue into secondary schools. In this representation those completing primary schooling by age 15 are a smaller number than those dropping out before completion. This is typical of low enrolment countries.

Grade progression and attrition (Figure 7) have to be understood in relation to patterns of participation by age (Figure 8). Many children do not enter grade 1 at the nominal age of entitlement. Those who subsequently repeat grades, or miss years of schooling, become overage. In some systems more than 25% of children are overage. Figure 9 shows how age can vary within grades using patterns that can be seen in enrolment data. Here the nominal entry age into primary school grade 1 is five years and the median age of grade 1 students is seven years, reflecting delayed entry (or repetition). A small number of pupils are enrolled at age 4. This can happen where parents find it convenient to enrol under-age siblings, and where schools permit early attendance. Children in grade 1 in this example vary in age between 4 and 11 years old. The patterns persist in higher grades so that, e.g. in grade 3 the age range is 7-13 years, and in grade 6, 10-18 years. Often higher grades have larger age ranges (since there are more chances to become over age the longer children persist in the system). They may also have fewer girls (not shown) if girls tend to leave school at younger ages than boys.

Figure 9 Enrolments by age and grade

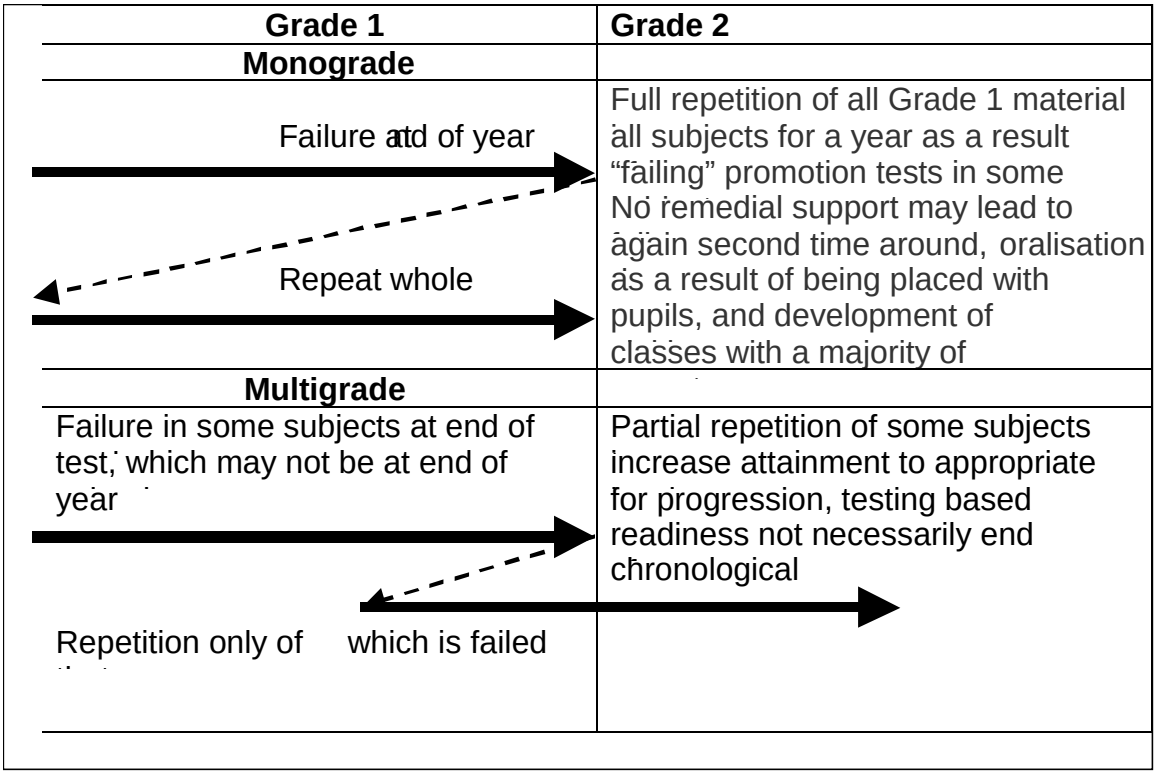


Repetition has many consequences that are not well researched. It is partly a result of curricula which are widely designed on the assumptions of mono-grade learning and teaching i.e. grouping children for teaching in grade groups defined by curriculum content and cognitive demand independent of age and capability, and ordering progression sequentially from grade to grade. Those who fail to achieve sufficient to be promoted become repeaters. One aspect of the problems that this creates is that learners may be repeating not because of general failure to achieve criterion learning outcomes across the curriculum, but because they achieve poorly in critical subject domains (e.g. medium of instruction, mathematics). Though the shortfalls are only in some areas of the curriculum monograde repetition requires all work

for a year to be repeated often without any special remedial attention to weaknesses. This is inefficient and pedagogically unwise (Lewin 2006). Multigrade approaches and more flexible patterns of class teaching could address this problem (Figure 10).

Serial repetition gradually increases the distance between the actual age of learners and their nominal age of their grade group. Ultimately this becomes a curriculum issue. If significant numbers are asked to repeat a grade then *de facto* what is being taught is inaccessible to those who are learning under the conditions that exists in particular schools. Changes in pedagogy and content are needed to overcome the learning problems. If children are allowed to progress from grade to grade without mastering most of the outcomes attributed to each grade they will become more and more out of touch with the capabilities needed to complete the grade successfully. Enhanced access therefore cannot be conceptualised without insight into the dynamics of classrooms and curricula, and their inter-relationships with achievement and progression.

Figure 10 Repetition and progression



Thus age-grade enrolment patterns are important. Over-age entry and progression delays primary school completion to ages where boys and girls may be subject to growing pressures to contribute to household income and to enter into marriage. They can result in grade groups with wide age ranges raising questions about appropriate pedagogy and cognitive strategies in the curriculum. And there may be social and behavioural consequences that stem from wide age (and presumably capability) grouping that results from repetition.

Conceptualising access in countries with different patterns of participation has to recognise that:

1. Actual age of entry is often more, and sometimes less, than the official age;

2. Many children are in grades below those appropriate for their age;
3. Age distribution within classes can cover five or more years;
4. Age of primary school completion may be several years above the nominal age for the last grade;
5. Many primary school children are of secondary school age;
6. Completion of secondary schooling may not occur until well after the age of 15 years.

One problem is whether and how over-age children should be counted in assessments of levels of access. Other problems are that late entry almost certainly reduces the chances of completion, slow progression through grades as a result of repetition leads to over-age completion of primary and entry to lower secondary, and age grade patterns often vary between boys and girls. In some cases girls enter school earlier than boys. However boys generally persist longer through to higher grades, especially in secondary school grades. This is responsible for many of the differences in some systems (e.g. in Ghana, Tanzania and Uganda) between boys and girls enrolments. Unusually grade 1 numbers can be inflated by under-age enrolment and where this is true it needs to be addressed.

The Dakar EFA Goals include "expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children" as an ambition, though no quantitative target is set. Until recently most EFA programme support has focused on primary with little or no attention to pre-school. However, pre-school provision is growing and is the subject of formal policy and commitments in several countries (e.g. Ghana and South Africa). Access to pre-school is an important consideration in addressing primary entry, progression and completion rates. It is likely that those with some effective pre-school experience are more likely to enter primary school at the appropriate age, and more likely to progress on schedule, though there is very little data on this from developing countries. Moreover where public subsidy is being extended to pre-school the incidence of benefit may be very uneven. More pre-schooling is urban rather than rural. Part subsidised pre-school is available more to those with higher household income. Exclusion in Zone 0 is therefore likely to grow in importance as an issue for EFA.

Reconceptualising access and equity issues is needed to recognise that:

- Different participation patterns shape starting points for universalising access and different pathways towards EFA
- Those excluded from schooling have different characteristics and fall into different zones of exclusion
- The majority who are not enrolled have attended but have dropped out
- Many more are enrolled but not attending regularly
- Amongst those enrolled and attending many may be learning little and are silently excluded
- EFA and universalising access to primary schooling cannot be seen in isolation from investment at secondary level, not least for reasons concerned with teacher supply and the impact of falling transition rates from primary to secondary on completion rates
- EFA and achieving the MDGs is both a supply side and demand side problem; as supply is enhanced demand may soften, especially amongst older children
- Gendered exclusion is related to structural factors within education systems, family choices, and socio cultural practices all of which are susceptible to change and that differential entry ages and rates of drop out explain important proportions of the variations that can be observed

- Access, progression and transition to higher levels are strongly related to household income suggesting that direct and indirect costs remain very significant causes of exclusion
- Sustaining expanded access will require viable financial frameworks for resource allocation which recognise demographic, economic, and political realities and that in low enrolment countries these will require continuing external assistance.

5. Developing a Research Agenda

Researching improved access in the context of EFA and the MDGs has very many dimensions. CREATE will address these selectively. The objectives of CREATE are to:

- Develop and sharpen the conceptual frameworks used to understand educational access in new ways, share these with decision makers and key stakeholders and project information into the public domain
- Generate new knowledge of the factors that shape access, analyse their significance, and link these to policy and practice at community level and above
- Evaluate the current status, extent of implementation, and the effectiveness of local, national and international strategies to improve access
- Identify feasible policy options backed by evidence which increase progress towards the educational MDGs and EFA before and after 2010.

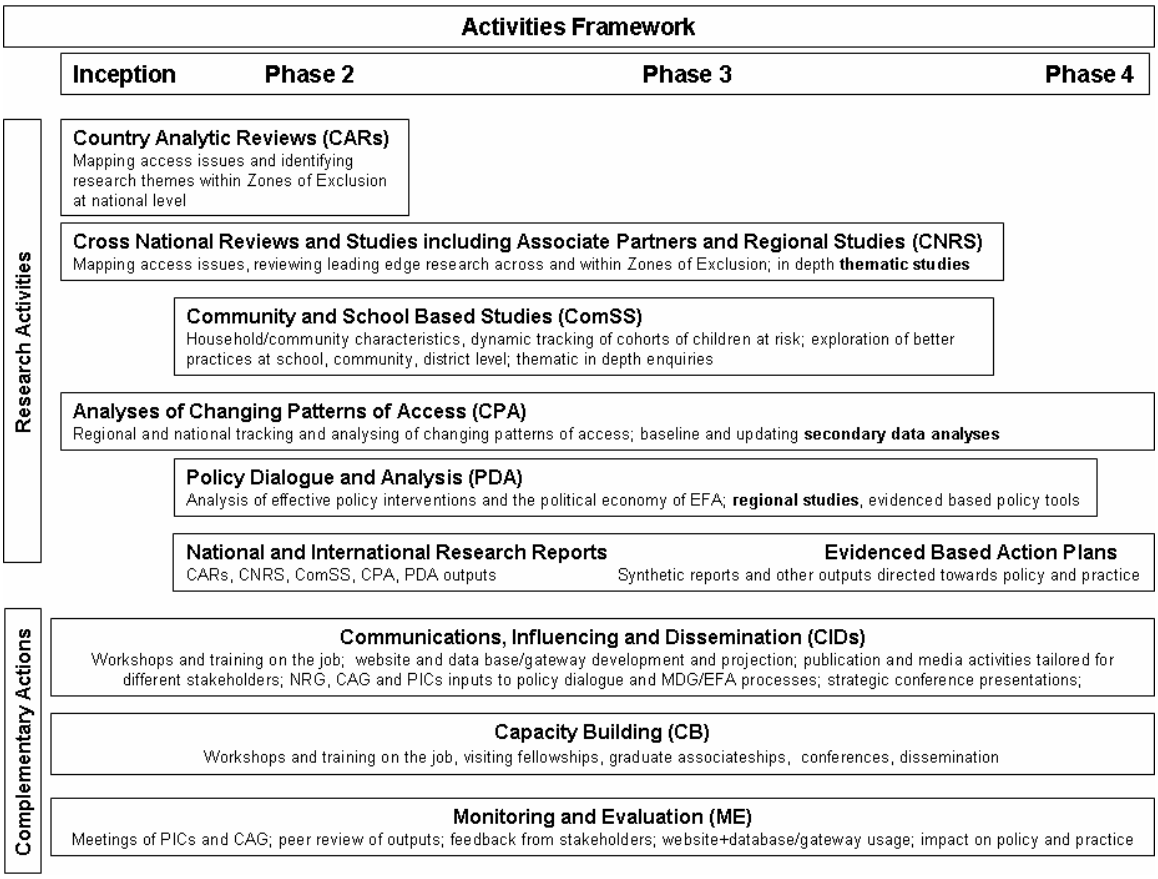
CREATE has identified six critical questions which it is exploring through a range of research activities. These are:

- What are current patterns of access and exclusion, which children are currently excluded from basic education (including alternative provision) at different stages, and why are they excluded?
- What strategies are most effective in meeting the basic educational needs of those who are excluded? To what extent are alternative forms of service delivery viable?
- What options are available to improve progression, completion and transition rates? How can drop before primary completion be reduced? How can re-entry of drop-outs be eased?
- What options exist to maintain and improve transition rates into lower secondary grades in pro-poor ways? What effects do low or declining transition rates have on primary completion?
- What are the political, social and economic conditions under which EFA has been achieved? Where progress has faltered what are the reasons for this? How has expanded access had an impact on social mobility and the intergenerational transmission of poverty?

These questions are being explored empirically in Bangladesh, Ghana, India, and South Africa with research teams based in local institutions. Some research will also be supported in other countries in SSA and South Asia and include some regional level reviews. In the first phase CREATE has commissioned analytic reviews at country level into the status of access in 2006 to provide a baseline data and review key issues and problems located in each national system. These analyses have been developed in parallel with a series of thematic reviews and studies which seek to develop state of the art insights into different research fields relevant to access. These include studies of access in relation to health and nutritional status, non-government providers, school processes and school governance, patterns of enrolment growth in SSA and selected countries, concepts in policy studies, inclusive education, EFA long term planning, and financing the expansion of secondary education. Both country level reviews and thematic research reviews will appear in CREATE's Discussion Paper series.

An overall framework for the research is shown in Figure 11.

Figure 11 Activities framework



The second phase of CREATE's research will continue to commission reviews and studies on themes and issues that provide analytic insight into access. However the main research activity in phase two is to develop empirical studies located at the community and school level. These will dynamically profile exclusion in the different zones identified by the conceptual map. In designing these studies many additional research questions have been identified within the general framework. These are being addressed through the systematic development of data collection instruments at different levels of analysis. Critically the baseline data that will be generated in each school community location will be updated and extended through a series of field visits over several years that should give insight into both the extent and processes of exclusion that operate in different zones of exclusion. The CREATE website[17] contains details of the research in progress.

In general empirical work will be guided by a range of research questions that are under development. These include:

- At community/school level what are current patterns of access and exclusion; who is currently excluded from basic education at different stages; and why are they excluded?
- How do family-community-school-local authority relationships interact to shape patterns of access? How have these been changing and why? What local level initiatives have been

[17] http://www.create-rpc.org

taken to improve sustained meaningful access? What higher level initiatives (local government, national policy etc.) have had an impact and why?

- How do community/school patterns of access and exclusion fit with patterns in surrounding areas at district and zonal level? How typical or exceptional are the communities/schools chosen for research?[18] How do they interact with surrounding areas (especially important where there is migration/school transfer/school transition issues).
- Where some sub-populations experience no access to basic education (i.e. children are never enrolled – Zone 1), what options are available to extend meaningful access and what is the evidence that these options (including alternative modes of delivery) are effective and sustainable? To what extent is non-participation a supply or demand side problem? Do enrolment practices (proof of residence/nationality, birth certificates, cultural preferences etc) create barriers to enrolment? How significant are family decision making processes in determining exclusion?
- How widespread is over (and under) age enrolment and what are its causes and consequences for retention, progression and drop out? How does repetition interact with age grade progress? Is repetition a rational choice?
- To what extent is pre-school available and for whom? Does it have a subsequent independent impact on enrolment and completion? Where there are policies to extend access to pre-school age children how are these being implemented with what consequences?
- What processes result in crossing thresholds into exclusion for those who have entered some form of primary education (in the early years, in mid-primary grades, at the end of primary, in lower secondary) and what factors are determinants of exclusion (Zone 3)? What options are available to improve progression, completion, and transition rates and reduce repetition and overage completion? How can drop before primary completion be reduced?
- What are the circumstances of those in Zone 2 who have dropped out? What would motivate them to return to basic education and what are the barriers to their re-entry? Are alternative sources of basic education provision available to them? Are these effective? To what extent is their non-participation a supply or demand side problem at different grade levels? Is child labour significant?
- What patterns of attendance exist (pupils and teachers) over time? Is poor attendance a precursor to drop out? What reasons result in irregular and chronic non-attendance and what mechanisms are there which might reduce the problem? How significant are health and nutrition related factors directly and indirectly in influencing participation?
- How is transition from primary to secondary school managed (and transitions within the primary cycle) and what effects does the process have on meaningful access of different sub-populations through to the age of 15 years? What effects do primary/secondary transition rates have on primary completion? What options exist to improve transition rates into lower secondary grades in pro-poor ways?
- What are the health and nutrition-related issues that shape participation and attendance? To what extent do schools act to identify and resolve health and nutrition related problems? What patterns of morbidity exist and what kinds of amelioration is available? Which school based health interventions show most promise? What are the pros and cons of school feeding programmes and their effects?

[18] It should be possible to use existing HH survey data for secondary analysis to establish patterns at different levels of analysis. In any case HH data and EMIS should be analysed for the specific communities chosen.

- How important are different kinds of disability in influencing access? How prevalent are different disabilities that result in exclusion? What strategies if any do schools have for supporting those with disabilities?
- To what extent are innovatory and alternative forms of service delivery being used with positive effects at different levels including alternative and parallel systems? What role(s) are alternate service providers playing with what effects and with what capacity to develop, displace or complement orthodox public school provision?
- What are the resource issues that are critical to improved access? Are direct and indirect costs of attendance a significant disincentive to the poorest? Where cash transfers exist what is their efficacy? What are the costs of interventions known to influence sustained enrolment e.g. school feeding?
- On current trends what levels of inclusion will be achieved by 2010 and 2015? Are these likely to result in near universal access and successful completion of primary schooling and participation through to the age of 15 years in lower secondary? If not what are the most promising strategies to achieve this result? What resources and other inputs would they require?

CREATE has adopted an extended definition of access that embraces secure enrolment and regular attendance; progression through grades at appropriate ages; meaningful learning which has utility; reasonable access to lower secondary grades especially where these are within the basic education cycle, and more equitable opportunities to learn for children from poorer households, especially girls.

Meaningful and equitable access depends on at least five clusters of variables that are likely to influence who enjoys how much access of different kinds for how long (Figure 12). All of these clusters have both supply and demand dimensions.

The first cluster groups together aspects of the social processes within schools[19] and the nature of learning and teaching which result in meaningful outcomes and sustained motivation to acquire new knowledge and skills. Schools have to be seen as learning arenas which are welcoming, support and nurture potential, and have to support achievement. Much of this depends on the supply side aspects of inputs – qualified and motivated teachers, learning materials, adequate facilities etc. However at least in some locations demand side factors ma come in to play. Without engagement and application from learners, especially at older ages, demand may weaken even if material inputs are sufficient and learning be compromised.

The second cluster is located around local and district level educational administration which provides the infrastructure to support basic education. This has strong supply side characteristics since the locus of responsibility to act in public systems is found in zonal/district/provincial education offices, school governing bodies, and local assemblies and councils. The actions of those involved as agents of the state shape access and its enhancement.

The third cluster embraces community level social, economic and political factors which surround educational provision. Aspiration and expectation, leadership, and role models shape educational access and provide material and non-material support for sustained enrolment and improved quality. The economic base of local communities conditions the resources that can be mobilised and constraints on participation arising from livelihoods and employment

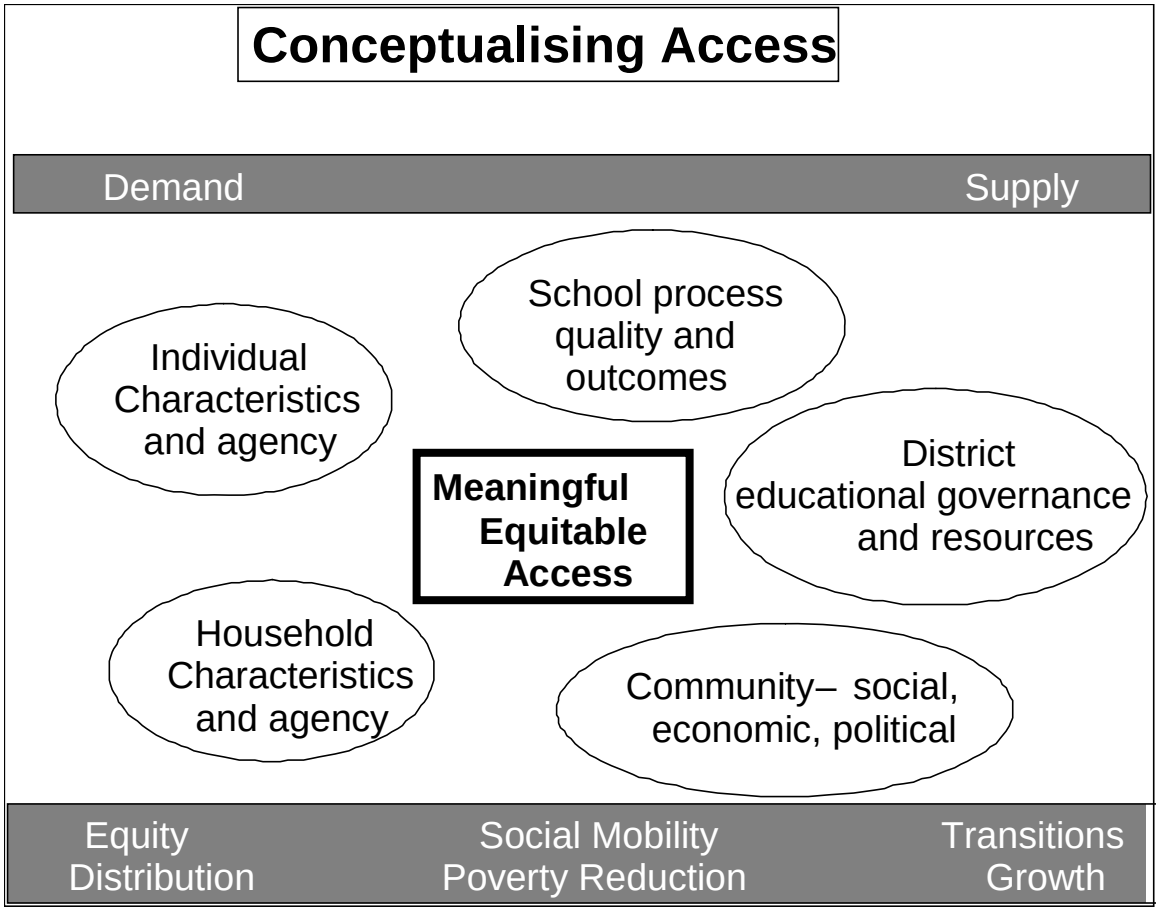
[19] Schools and other organisations that offer equivalent basic education through different delivery systems.

opportunities. Both supply and demand are affected by community level actions.

The fourth cluster concerns household characteristics and the agency that family members bring to participation in basic education. Household decision making on school attendance and family strategies to benefit from the knowledge and skill that schooling can provide are important influences on enrolment, persistence and drop out before completion. The cultural capital of households and the preferences households express influence demand for schooling and the support young learners receive.

The fifth cluster recognises that characteristics of individual learners are important. Their dispositions, capabilities and agency affect motivation to learn, application to learning activities, and learning outcomes. The more child centred basic education is, the more important it will be to understand what learners bring to schools, and how school processes address learning needs that may take very different forms for different individuals. Sustained participation depends on realistic accommodations of learners characteristics. Older children in particular acquire individual agency which shapes demand, participation and the extent to which meaningful learning takes place.

Figure 12 Conceptualising factors affecting access



CREATE's empirical work is informed by these clusters of variable. Communities (three to six in each country) will be selected containing 30-100 primary and secondary schools[20] chosen to be illustrative of areas where access is known to be a problem. Secondary analysis of EMIS and household survey data will assist in establishing baselines and selecting communities. CREATE will establish baseline data for each community school site; generate insight into retrospective patterns of access; follow cohorts of children through the next three years to identify changing patterns of access; locate and visit households with out-of-school children; seek causal relationships for sustained access; and identify better practice and feasible policy and practice interventions. The latter should generate opportunities to monitor the impact of interventions at community/school level that are initiated by communities and local authorities. This will allow comprehensive insights over time into the factors which determine sustained levels of access in each zone of exclusion.

CREATE will support the analysis of secondary data sets (e.g. household survey/living standards, census) and EMIS school census data to explore relationships that may exist at the national and district levels. The data collected will generate opportunities to develop thematic analyses. These will vary according to context but may include the impact of different patterns of school financing (e.g. introduction of capitation, cash transfers) on participation; direct costs in fee free systems; the consequences of over-age enrolment and delayed progress especially for girls; the impact of school feeding programmes; school level tracking and monitoring systems; community level and NGO initiatives to improve access; and mechanisms that improve transition and retention at secondary. Support will be provided to expand the work on non-state providers in Bangladesh and India. Additional secondary analysis of household and additional data collected within the longitudinal birth to twenty data sets in South Africa will provide a unique perspective on access issues over time. Transition to secondary issues will be explored in all sites.

Cross national work and additional thematic studies will continue alongside the main empirical work. These will include research reviews, and papers based on small scale empirical work, on topics that include disability and special needs; the political economy of EFA across six countries; school management committees and the Mali experience; a review of factors affecting drop out; a follow up study of a cohort of Kenyan EFA students; a review based on gender and access issues; intergenerational mobility and basic education in Sri Lanka; changing patterns of access using sub-regional data sets; the political economy of EFA; and access and small schools/multi-grade issues in India and Sri Lanka. A South Asian regional study will be consolidated into an integrated set of documents and regional perspectives on SSA will be developed.

[20] In South Africa the number will be smaller as a result of higher costs.

6. Concluding Remarks

Improved access to education, broadly defined is central to progress towards EFA and the MDGs. It is also essential for development more generally. Rights to education, and their realisation through meaningful participation, are fundamental to any recent conception of development. The knowledge and skill that educational participation can and should confer on the next generation will contribute to poverty alleviation albeit that this alone will be a necessary but insufficient condition for progress.

This paper has briefly outlined some of the realities and concerns that surround access and exclusion in poor countries. It seeks to reopen and extend debate about how access is conceptualised and layout a framework for some of the research that CREATE is developing. It is therefore very much an introduction to some new ways of thinking about access, an invitation to develop insightful and significant studies and reviews of the many different dimensions that will shape improved access, and an opportunity to develop and locate the discussions around improved access at many different levels: household, community, school, national, and international. Improved access requires action at all these levels and across the levels where these interact.

Globally large increases in the assistance needed to poor countries to meet the MDGs have been promised and partly realised. Some but not all governments have risen to the challenges and are seeking insights and strategies that can scale up recent achievement and lead to much more equitable, effective and universal access to basic education. Many communities have demonstrated initiative and success in including the excluded, but very large problems remain. Improving access to education will remain a major global issue well beyond 2015, if by access we include the extended definition suggested in this paper. It will only be successfully addressed by actions at many different levels, working with evidenced insight and consistent commitment. CREATE seeks to support this process.

References

Ahmed, M. and Nath S. R. (2005), *Education Watch Quality with Equity: The Primary Education Agenda,* Dhaka: Campaign for Popular Education.

Aikman, S. and el Haj, H. (2005) Mobile multigrade schooling as a pragmatic response to EFA for pastoralist peoples, in Little, A.W.(ed) *Education For All: the challenge of multigrade teaching,* Amsterdam: Kluwer Academic Publishers.

Akyeampong K (2006) Costs and Financing of Secondary Education in Ghana: A Situational Analysis World Bank Secondary Education in Africa Research Programme. Washington DC, World Bank.

Birdsall, N., Levine, R. and Ibrahim, A. (2005) *Toward universal primary education: investments, incentives and institutions: task force on achieving universal primary education*, New York: United Nations Millennium Project.

Boyle, S., Brock, A., Mace, J. and Sibbons, M. (2002) Reaching the Poor: the 'costs' of sending children to school: a six country study, *DFID Educational Papers, No. 47.* London: DFID.

Bruns B, Mingat A, and Raktomalala R 2003 *A Chance for Every Child: Achieving Universal Primary Education by 2015.* World Bank: Washington.

Buchman, C. and Brakewood, D. (2000) *Labor Structures and School Enrollments in Developing Societies: Thailand and Kenya Compared, Comparative Education Review*, 44 (2): 175-204.

Canagarajah, S. and Nielsen, H. (1999) Child Labor and Schooling in Africa: a comparative study, *Social Protection Discussion Paper Series No. 9916*, Washington: World Bank.

CEC/CREATE (forthcoming 2007) Attaining and Maintaining Universal Primary Education in Commonwealth Africa – Learning from Experience. A Study for the Commonwealth Secretariat. CREATE Pathways to Access Series. Brighton, University of Sussex.

Chowdhury, A.M.R., Nath, S.R. and Choudhury, R.K. (2003) 'Equity Gains in Bangladesh Primary Education,' *International Review of Education*, 49(6): 601-619.

Cochrane, S. (1979) Fertility and Education; What Do We Really Know? *World Bank Staff Working Paper No 26.* Washington: World Bank.

Cochrane, S., Leslie, J., and O'Hara, D. (1980) The Effects of Education on Health. *World Bank Staff Working Paper No 405.* Washington: World Bank.

Colclough, C., Al-Samarrai, S., Rose, P. and Tembon, M. (2003) *Achieving Schooling for All in Africa: costs, commitment and gender.* Ashgate: Aldershot and Burlington.

Colclough C. with Lewin K M, (1993) *Educating All the Children; Strategies for Primary Education in Developing Countries.* Oxford: Oxford University Press.

Daun, H. (2000) 'Primary Education in Sub-Saharan Africa – a moral issue, an economic matter,

or both?' *Comparative Education*, 36(1): 37-53.

Dunne, M. and Leach, F.E (2005) Gendered School Experiences: the Impact on Retention and Achievement in Botswana and Ghana. *DFID Educational Papers No. 54*. London: DFID.

Education Watch (1999, 2000, 2001, 2002, 2003) *Annual Review*. Dhaka: Campaign for Popular Education.

Fentiman, A., Hall, A. and Bundy, D. (1999) 'School Enrolment Patterns in Rural Ghana: a comparative study on the impact of location, gender, age and health on children's access to basic schooling,' *Comparative Education*, 35(3): 331-349.

Govinda, R. (ed) (2002) *The India EFA Education Report: A Profile of Basic Education*. New Delhi: Oxford University Press.

Kabeer, N., Nambissan, G.B. and Subrahmanian, R. (eds) (2003) *Child Labour and the Right to Education in South Asia: Needs versus Rights?* New Delhi, Thousand Oaks, California and London: Sage Publications

Laugharn, P. (2001) *Negotiating 'Education for many': enrolment, dropout and persistence in the community schools of Kolondieba, Mali*. Unpublished PhD thesis, University of London.

Lewin, K. M. (2007a, forthcoming) *Seeking Secondary Schooling in Sub Saharan Africa; Strategies for Sustainable Financing*. Secondary Education in Africa Programme. Washington: World Bank.

Lewin, K. M. (2007b) *Expanding Access to Primary and Secondary Schooling: Long Term Planning for EFA and the MDGs* Commissioned study for the Department for International Development Advisors. Published in Pathways to Access: Reseach Discussion paper No 8, CREATE, Centre for International Education, University of Sussex.

Lewin, K. M. (2007c) *Expanded Access to Secondary Schooling in Sub-Saharan Africa: Key Planning and Finance Issues* Commissioned study for the Department for International Development Advisors Retreat. Published in Pathways to Access: Reseach Discussion paper No 7, CREATE, Centre for International Education, University of Sussex.

Lewin, K. M. (2007d) 'The Limits to Growth of Non-Government Schooling in Sub-Saharan Africa,' in Walford, G. and Srivastava, P. (eds) *Private Schools in Developing Countries*. London: Symposium Books.

Lewin K M (2006) **Costs and Finance of Multigrade – How Do the Books Balance?** in Little A W (ed) Education for All and Multigrade Teaching: Challenges and opportunities, Springer, Dordrecht, Netherlands

Lewin, K. M. (2005) 'Taking Targets to Task: Planning Post Primary Education,' *International Journal of Education and Development*, 25 (4), pp. 408-422.

Lewin, K. M. and Sayed, Y. (2005) Non-government Secondary Schooling in Sub-Saharan Africa; Exploring the Evidence in South Africa and Malawi**,** *Researching the Issues: DFID Educational Research Series No 59*. London: DFID.

Lewin, K. M. and Stuart, J. S. (2003) Researching Teacher Education: New Perspectives on Practice, Performance and Policy, *DFID Research Series 49a.* London: DFID.

Lewin, K. M. and Caillods, F. (2001) *Financing Secondary Education in Developing Countries; Strategies for Sustainable Growth.* Paris: International Institute for Educational Planning.

Little, A.W. (ed) (2006) *Education For All: the challenge of multigrade teaching.* Dordrecht: Springer Press.

Little, A. W. (1999) *Labouring to Learn: towards a political economy of plantations, people and education in Sri Lanka*. London: Macmillan.

Lockheed, M., Jamison, D. and Lau, L. (1980) 'Farmer Education and Farm Efficiency' in King, T. (ed) *Education and Income.* Washington: World Bank.

Nokes, C., Van de Bosch, C. and Bundy, D.A.P. (1998) *The Effects of Iron Deficiency and Anemia on Mental and Motor Performance, Educational achievement, and behavior in children: an annotated bibliography*. INACG document. Washington: ILSI Press.

Pridmore, P., Yates, C., Kuhn, K. and Xerinda, H. (2005) The role of open, distance and flexible learning (ODFL) in mitigating the impact of HIV/AIDS on out-of-school youth in South Africa and Mozambique. *DFID Educational Papers (in press)* London: DFID.

Psacharopoulos, G. and Woodhall, M. (1985) *Education and Development; An Analysis of Investment Choices.* Oxford: Oxford University Press.

Partnership for Child Development (1998) 'The health and nutritional status of school children in Africa: evidence from school-based health programmes in Ghana and Tanzania,' *Transactions of the Royal Society of Tropical Medicine and Hygiene,* l 92: 254-261.

Ravallion, M. and Wodon, Q. (1999) Does Child Labor Displace Schooling? Evidence on behavioural responses to an enrolment subsidy. *World Bank Policy Research Working Paper no 2116* . Washington: World Bank.

Rose, P. and Al-Samarrai, S. (2001) 'Household Constraints on Schooling by Gender: empirical evidence from Ethiopia,' *Comparative Education Review,* 45(1): 36-63.

Rose, P. and Kadzamira E. (2005) *Non-State Providers of Educational Services in Malawi.* Paper for DFID Project on Non State Providers of Basic Services. Birmingham: International Development Department, University of Birmingham.

Seers, D. (1977) 'The New Meaning of Development,' *International Development Review,* 3.

Sen, A. K. (1999) *Development as Freedom*. Oxford: Oxford University Press.

Streeten, P. (1999) *Ten Years of Human Development.* Human Development Report. New York: UNDP.

UIS (2005) UNESCO Institute of Statistics Data Base

UNESCO (2002) *Education for All: is the world on track? EFA Global Monitoring Report* Paris: UNESCO.

UNESCO (2003) *Gender and Education for All: the leap to equality*. EFA *Global Monitoring Report.* Paris: UNESCO.

UNESCO (2005) *Education for All: the quality imperative*. EFA *Global Monitoring Report.* Paris: UNESCO.

UNESCO (2006) *Literacy for Life. EFA Global Monitoring Report* Paris: UNESCO.

World Bank (1993) *The East Asian Miracle: Economic Growth and Public Policy*. Washington: World Bank.

Appendices

Appendix 1 The Six Dakar Goals and the Eight MDGs

Dakar Framework for Action: Education for All; Meeting our Collective Commitments. UNESCO; Paris; 2000

Goals
1. Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children
2. Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality
3. Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes
4. Achieving a 50%improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults
5. Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring that girls full and equal access to and achievement in basic education of good quality
6. Improving all aspects of the quality of education and ensuring excellence of all so that recognised and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

The Millennium Development Goals

Goals and Targets
Goal 1. Eradicate extreme poverty and hunger Target 1. Halve, by 2015, the proportion of people whose income is less than one dollar a day. Target 2. Halve, by 2015, the proportion of people who suffer from hunger.
Goal 2. Achieve universal primary education Target 3. Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.
Goal 3. Promote gender equality and empower women Target 4. Eliminate gender disparity in primary and secondary education, preferably by 2005, and to all levels of education
Goal 4. Reduce child mortality Target 5. Reduce by two-thirds, by 2015, the under-five mortality rate.
Goal 5. Improve maternal health Target 6. Reduce by three-quarters, by 2015, the maternal mortality ratio.
Goal 6. Combat HIV/AIDS, malaria and other diseases Target 7. Have halted by 2015 and begun to reverse the spread of HIV/AIDS. Target 8. Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.
Goal 7. Ensure environmental sustainability Target 9. Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources. Target 10. Halve by 2015 the proportion of people without sustainable access to safe drinking water. Target 11. By 2020 to have achieved a significant improvement in the lives of at least 100 million slum dwellers.
Goal 8. Develop a global partnership for development Target 12. Develop further an open, rule-based, predictable, non-discriminatory trading and financial system. (Includes a commitment to good governance, development, and poverty reduction – both nationally and internationally.) Target 13. Address the special needs of the ldcs. Target 14. Address the special needs of landlocked countries and small island developing States Target 15. Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable Target 16. In co-operation with developing countries, develop and implement strategies for decent and productive work for youth. Target 17. In co-operation with pharmaceutical companies, provide access to affordable essential drugs in developing countries. Target 18. In co-operation with the private sector, make available the benefits of new technologies, especially information and communications.

Appendix 2 Some Research Propositions

This list represents some of the ideas on which CREATE is working. These are expressed as propositions which imply hypotheses. These propositions are included to generate discussion and some will be explored in empirical case studies in selected districts, through secondary data analysis, and from thematic reviews.

Many of these propositions have to be located in the different system contexts. Thus some may hold in the communities we undertake research, but will not necessarily hold in other communities or at national level. For example gender disparities at entry to primary and in rates of progression through to completion by age vary considerably between communities. In some cases girls enrol later and in other cases earlier than boys. In some areas selection to secondary school is gender fair, but in others it is unequal for structural and other reasons. Analysis of secondary data from national data bases also has limitations. Propositions that hold at national level may or may not be reflected across several countries. Cross national comparisons therefore have to be approached with awareness of system specificities and judgements made about when this level of unit of analysis is plausibly valid and when it is not.

These propositions have been shared with PICs who will develop additional system and location specific propositions as the CREATE research programme develops.

Some CREATE propositions are[21]:

1. Most children currently out-of-school have had the opportunity to attend school and have done so. The problem is that they have not persisted successfully through to higher grades. Most out-of-school children are in households where either they or their siblings attended school for a period. The MDGs and EFA therefore depend on much higher levels of retention, as well as efforts to include the minority who never enrol from households where no children participate.

2. Children who *never enrol* are in households where either i) they could have enrolled but did not (best solution is to extend the reach of the existing system and ensure there is effective demand) or ii) they are in households where enrolment was not feasible structurally (best solution depends on diagnosis – fragile (local) state, nomadic lifestyle, migrant status (legal/illegal?), excluded as a result of disability etc.).

3. Overage entry to primary school and delayed progression as a result of repetition and interrupted schooling are primary causes of non-completion of basic education. If not resolved this will delay or prevent the achievement of the MDGS and Dakar Goals. Patterns differ but where completion rates are lowest, over age enrolment is greatest. Females tend to be especially disadvantaged as a result of likely exit around puberty. In much, but not all, of SSA the preponderance of the boy child at secondary level is due more to differential persistence to much older ages, than to discrimination on entry.

4. Rapid massive expansion in some primary school systems has produced gross over enrolment in grade 1, high drop out from grades 1-3, and slow improvements in

[21] These propositions are presented in no particular order of priority

enrolments in grade 6 and 7. In the worst cases, gross enrolments double or more in the lowest grades, and output from grade 6 or 7 remains static after a generation of EFA children have passed through the system. Overall primary Gross Enrolment Rates appear to improve. However, internal efficiency remains low, as do completion rates.

5. Achieving EFA and the MDGs depends on the enrolment and successful completion of the "last 20%" in most low enrolment countries. This is likely to be a problem substantially located in areas where population is widely dispersed and where primary schools are likely to be small - over 80% of primary schools in India appear to have three or less teachers. Effective multi-grade teaching and learning is therefore essential based on a restricted number of core curriculum subjects, appropriate learning materials, and the adoption of multi-grade pedagogies.

6. High rates of enrolment growth increase polarisation by the socio-economic status of households. This is likely to be true where quality is rapidly degraded, high cost private providers support differentiated demand, and competition for desirable schools intensifies (especially at the transition from primary to secondary). This effect may be compounded where radical curriculum change is introduced at the same time as rapid expansion – early adopters benefit disproportionately, and late adopters are left behind.

7. Enrolment rate indicators conceal low levels of *daily attendance* which lead to poor achievement and drop-out. In some systems child attendance may average less than 60% on a given day. When this is coupled with irregular teacher attendance this may result in the loss of more than half of all learning time. Indicators of attendance have to be included in measures of progress towards the MDGs and EFA.

8. Private (i.e. unsubsidised, for profit) providers will not contribute significantly 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 high income. Other non-state providers (not for profit NGOs) will have limited reach and capacity to reach out to the poorest without public subsidy. Large scale public subsidy of such NGOs is unlikely to be the strategy of choice for most States.

9. Poor attendance, low achievement, and subsequent drop out are health and nutrition related in complex ways. Greater integration of sentinel health and nutrition monitoring in schools, coupled with access to services that ameliorate common health and nutrition problems, should improve access and retention.

10. The non-school fee costs to households of primary schooling are becoming far more important for exclusion than the charging of formal school fees. 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). In general, capitation systems that assume that fees will be zeroed if schools receive capitation payments under-fund capitation and fail to replace lost income. The effects are perverse if they subsidise those willing and able to pay. Capitation systems may be discredited if schools continue to charge to replace income they lose.

11. At secondary school level fees and financing remain central to problems of expanded access. Mass secondary education in SSA 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 SSA. Nor will such households be able to afford public secondary schooling as currently configured.

12. In those countries with high entry rates, overall GERs at primary, and completions rates greater than 90% more balanced investment is needed between educational levels than normative benchmarks for investment in primary (FTI etc) 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. Many grants and loans and GBS agreements apply this as a conditionality.

13. Full time residential, pre-career training of teachers is expensive and often unlikely to be able to train the volume of new teachers needed to meet demand in expanded systems. Alternative systems of training are needed which have higher throughput, shorter lead times, and more ability to deliver support to teachers as and when needed. Experience with teacher education using techniques of distance education and information technologies has yet to demonstrate cost effectiveness, except in middle income environments.

14. Supply side problems (e.g. not enough schools and teachers) are being replaced by demand side problems of access, especially where entry rates are high and drop out and non-completion excessive. EFA is unachievable without understanding and addressing these problems (of quality, relevance, effectiveness, falling perceived rates of return, high opportunity costs etc). Effective demand problems are especially evident in upper primary and lower secondary.

15. Migration (cross border, internal, related to urbanisation and to internal displacement) is changing the landscape of educational access. It manifestations require new approaches to reach migrant children, migrant children within households, and children left behind by migrant households. Information on migrant flows is largely absent at systemic level, and provision is largely unplanned.

16. Child labour inside and outside the household does not necessarily impede access and attendance. There are likely to be threshold effects below which the impact of such child labour is minimal (or even positive if it increases household income and affordability). The impact of different types of child labour on younger and older children is likely to be differentiated. The effects will vary considerably depending on the nature, extent, and conditions under which child labour occurs. Legislation may have little impact on the problems that arise in different community contexts.

17. 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. Without this, quality will degrade with expansion, demand will fail, and public costs will become unsustainable without very high levels of external dependence.

Consortium for Research on
Educational Access, Transitions & Equity

Funded by DFID

Report summary:
The Consortium for Research on Educational Access, Transitions and Equity (CREATE), was established with DFID support in 2006. It is a partnership between research institutions in the UK, Bangladesh, India, Ghana and South Africa. This paper first explores why access issues remain at the centre of the problems of achieving Education for All and the Millennium Development Goals. After outlining the magnitude of the challenge of improving access to universal levels, the paper develops analytic frameworks to understand access issues in new ways, and generate empirical studies related to each of the zones of exclusion identified. The last part of the paper briefly outlines some of the empirical research that is being developed.

Author notes:
Keith M Lewin is Professor of International Education at the University of Sussex and Director of CREATE. Over the last 30 years he has worked widely in Africa and Asia on educational planning and finance and contributed to both the Jomtien and Dakar Education for All Conferences. Recently he has acted as a senior consultant to the Secondary Education in Africa programme of the World Bank, and has contributed directly to national planning processes in Uganda, Rwanda, Tanzania, and Sri Lanka. His books include Financing Secondary Schools in Developing Countries, Implementing Basic Education in China, Researching Teacher Education, and Educating All the Children.

Address for Correspondence:
CREATE, Centre for International Education
Sussex School of Education, University of Sussex
Brighton BN1 9QQ, UK.
Website: http://www.create-rpc.org
Email: create@sussex.ac.uk

BRAC UNIVERSITY
UNIVERSITY OF EDUCATION, WINNEBA, GHANA
Education for Excellence
Education Policy Unit
University of Sussex
Sussex Institute
Sussex School of Education
Centre for International Education
IOE LONDON
Leading education and social research
Institute of Education
University of London