EdQual

A Research Programme Consortium on
Implementing Education Quality in Low Income Countries

EDUCATION QUALITY - RESEARCH PRIORITIES AND APPROACHES IN THE GLOBAL ERA

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Leon Tikly
and
Angeline M. Barrett

University of Bristol, UK

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A Research Programme Consortium on
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ABSTRACT

This paper sets out the approach and rationale for researching education quality in low income countries that underpins a 5-year research programme focused on sub-Saharan Africa. Equity is an indispensable dimension of education quality. Mainstream conceptualisations of quality are critiqued as divorced from any broader understanding of the historical, socio-cultural, political and economic forces that generate inequality. Our approach is influenced by critical theory, postcolonial theory and political economy. At its heart is a concern to develop a rich, contextualised understanding of what counts as education quality in different settings and for different groups of learners along with the processes of teaching and learning that lead to improved outcomes, especially for the most disadvantaged groups. This requires recognising that the role of education systems in both perpetuating and overcoming inequalities including those based on gender, class, 'race', ethnicity, language, religion, urban/ rural location, and disability. Capacity-building is intrinsic to the research programme, which means seeking to empower policymakers, educators, learners and other key role-players through supporting their development as reflective practitioners and agents of change. At the same time, we aim to be self-reflexive and self-critical concerning our own role as education researchers interested in Africa.

Keywords: Education Quality; sub-Saharan Africa; Critical approaches.

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Author for correspondence: angeline.barrett@bristol.ac.uk

SECTION ONE: INTRODUCTION

The aim of the paper will be to develop a critical view of education quality appropriate for sub-Saharan African countries facing the challenges of globalisation in the 21st Century and to discuss the implications of such a view for research. The paper begins with a review of existing approaches to conceptualising education quality within the Education for All (EFA) movement, most especially the framework presented in the 2005 EFA Global Monitoring Report, *The Quality Imperative* (UNESCO, 2005). This will be used as a basis for setting out our own approach which draws inspiration from Sen's (1999) notion of capabilities and for considering the research implications of this through a focus on the research processes and approaches of the Implementing Education Quality in Low Income Countries (EdQual) Research Programme Consortium (RPC). Before proceeding, however, and in order to contextualise the debate, it is worth setting out some of the basic features of the EdQual RPC and what we understand by a capabilities approach.

EdQual is funded by the UK Department for International Development (DFID) for five years and commenced in 2005. It is one of three such education RPCs and one of a total of eighteen across the development field. The aim of the RPC is to generate new knowledge to assist governments in low income countries, DFID and the international development community to implement initiatives that will improve the quality of education in ways that will benefit the poorest people in the world and will promote gender equity. The consortium will also aim to create a sustainable resource through supporting African partner institutions to become regional centres of excellence in one or more areas of education quality and through strengthening capacity within organisations to successfully implement change. The partners in the consortium include the Universities of Bristol and Bath (UK), the Witwatersrand, Johannesburg (SA), Cape Coast (Ghana), Dar es Salaam (Tanzania) and the Kigali Institute of Education (Rwanda). We also have associate partners in the Aga Khan University (Pakistan) and in the Universidad de La Frontera (Chile). We have five main research projects in the areas of:

- School effectiveness (Bristol);
- Language and literacy (Tanzania, Ghana);
- ICTs in basic education (Rwanda, South Africa, Chile);
- Implementing science and maths curriculum change (South Africa, Rwanda, Pakistan); and
- Leadership and management for quality improvement (Ghana, Tanzania, Pakistan).

Whilst the School Effectiveness project uses multilevel modelling to perform secondary analysis of the SACMEQ[1] II data set, the remaining projects are intervention studies based on action research methodologies.

There are also three small scale projects in the areas of inclusion, school buildings and the use of ICTs in education to support community empowerment. The areas for research were identified through a series of national consultative workshops with policy makers and practitioners. EdQual currently funds ten PhD students and has undertaken several research training, project management and administrator training workshops targeted at building capacity amongst project partners to undertake research.

Developing a conceptual understanding of education quality and its contribution to poverty reduction is a key objective and will, necessarily, be an ongoing iterative process incorporating the

[1] In 2002, Southern and Eastern African Consortium for Monitoring Educational Quality collected pupil, class and school-level data from around 40 000 Year 6 pupils across 14 countries, namely Tanzania (Mainland), Zanzibar, South Africa, Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, Uganda and Zambia.

views of different stakeholders and grounded in our empirical research in a range of very different contexts. This paper should be seen as one component of that process. Central to our approach which we set out below is the view that issues of education quality cannot be understood in a simple 'technicist' sense and must make clear its underpinning values and theoretical starting points. In the case of our own emerging understanding of quality, we have found Sen's work on capabilities to be a useful point of departure.

In his seminal work "Development as Freedom", Sen (1999:18) called attention to the "capabilities" of persons to lead the kind of lives they value and have reason to value. He proposed that the success of a society could better be evaluated by the substantive freedoms its members enjoy than by traditional measures of economic wealth, such as per capita income. However, as well as ends in themselves, Sen sees freedoms as means of development as greater freedom enhances the ability of people to help themselves and also to influence the world. One of his central pieces of evidence is the fact that there has been no recorded famine within a functioning democracy. Sen is careful to distinguish between the various "capabilities" that an individual or a society have reason to value and "functionings", those capabilities that are actually realised. He deliberately avoids prescribing which capabilities should be valued. Rather he believes that societies should determine which capabilities they value through public participation and dialogue. As Unterhalter (2003:666) explains, any framework of thinking needs to be open enough to be utilised in diverse settings. Hence, when we say that we draw on the capabilities approach we are saying two things about education quality. First, we are saying that a quality education should expand what a person and what society can do and be that it has reason to value. Second, we are saying that educational outcomes should be a matter of dialogue, subject to debate throughout society. There are implications for how we do research. Our research should open up dialogue on educational issues amongst the policy makers, practitioners, learners, communities and parents with whom we interact to debate what they value in a basic education. In this respect understandings of education quality need to be grounded in the realities and perspectives of African-based policy makers, researchers, practitioners, learners and communities. The EdQual programme is seeking to put this into practice by working closely with practitioners to design initiatives and, where appropriate, inviting communities to join us in debate and dialogue. At the same time, it is building relationships with policy makers and through a series of consultative workshops solicited views on what our research priorities should be that informed the design of our research projects from the outset.

Our view of capacity building is also closely related to a capabilities approach in that both emphasise the rights and freedoms, particularly of the most disadvantaged groups. Following Eade (1997) writing for Oxfam, 'capacity building is an approach to development not something separate from it. It is a response to the multi-dimensional processes of change, not a set of discrete or pre-packaged technical interventions intended to bring about a pre-defined outcome' (p. 24). The nature and extent of capacity building depends very much on context and needs to be determined by the needs of the groups themselves. Thus building capacity within the context of a capabilities approach may involve supporting organisations to develop a range of intellectual, organisational, social, political, cultural, material, practical or financial capabilities. First however we turn to a critique of existing models of quality.

1.1 EFA Frameworks for Conceptualising Quality

The aim of this section is to describe how our own approach to understanding quality draws on and extends existing quality frameworks. The main argument advanced in this and the next section is that whilst existing models usefully highlight a range of factors and processes that need to be taken into account when thinking about education quality, they are insufficient for supporting our overall goal which is to provide a contextually relevant understanding of quality linked to the realities of 21st century Africa in the global era.

From the inception of the current push for EFA in the early 1990s, an emphasis has been placed on the quality of education provision. The World Declaration on Education for All makes it clear that providing educational opportunities for every individual on the planet is a worthwhile endeavour so long as the quality of education is sufficient to meet basic learning needs, defined as follows:

> These needs comprise both essential learning tools (such as literacy, oral expression, numeracy, and problem solving) and the basic learning content (such as knowledge, skills, values, and attitudes) required by human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions, and to continue learning. The scope of basic learning needs and how they should be met varies with individual countries and cultures, and inevitably, changes with the passage of time. (World Conference on Education for All, 1990: article I)

This short paragraph illustrates that it is impossible to discuss what is meant by education quality without taking a position on the goal and outcomes of education. As education is both a means and ends of development (Sen, 1999), discussion of education quality must also take a position on human development and, as the last sentence in the quote above acknowledges, national development.

Quality is a cross-cutting issue that touches on every aspect of education. Hence, frameworks for conceptualising education quality tend to constitute mappings of an idealised education system. The most persistent underlying pattern for such mappings is what we will call the basic process model of education, illustrated in figure 1. DFID has divided its funding for education research between three RPCs in a way that can be crudely mapped onto this model. The access RPC, the Consortium for Research on Equity, Access and Transitions in Education (CREATE) is concerned with getting individuals into school. The quality RPC (EdQual) looks at what goes on within the 'black box' of schools and classrooms. Lastly, the outcomes RPC, Research Consortium on Educational Outcomes and Poverty (RECOUP) is concerned with how education impacts on development. The framework for understanding, monitoring and improving education quality presented in the 2005 EFA Global Monitoring Report (GMR2005), *The Quality Imperative* (UNESCO, 2005), is essentially an elaboration of the process model (see figure 2).

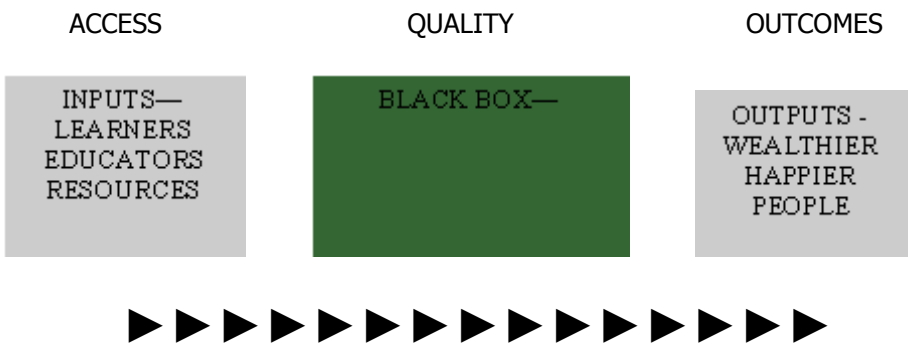

Figure 1; the process model of education

GMR2005 identified five main elements of education systems that interact to determine quality. **Learner characteristics**, their capacities and experience influence how and how quickly people learn. Hence, early childcare and child health programmes, interventions such as distributing vitamin tablets, can be viewed as raising quality (Abadzi, 2006). However, many agencies promoting EFA look at learners and education quality from the other direction, requiring that a quality education meet the diverse needs of learners (e.g. GCE, 2002; Inter-Agency Task Team (IATT) on Education, 2006; UNICEF, 2007). GMR2005 identifies several levels of **context** including the global (e.g. globalization, aid strategies); national (e.g. national governance; public expectations); local/community (e.g. economic and labour market conditions in the community); and family/household (e.g. time available for schooling and homework, parental support). Links

between education and context are two-way. "Education can help change society … however, education usually reflects society rather strongly" (UNESCO, 2005:35). Opportunities to increase resources for education depend on economic affluence.

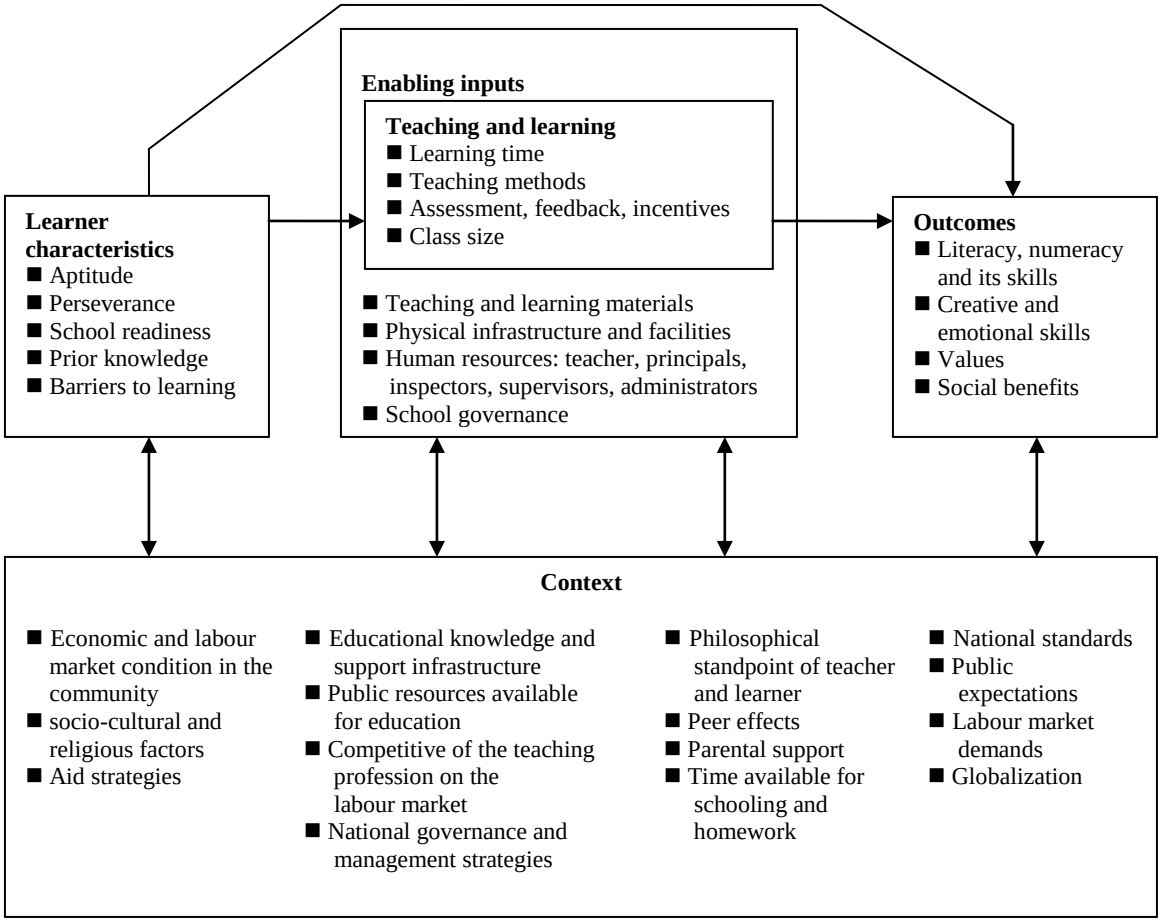

Figure 2: GMR2005 Framework for understanding education quality (UNESCO, 2005:36)

GMR2005 and similar process models, notably school effectiveness models (Heneveld, 1994b; Scheerens, 2000) represent schooling as we experience it as individuals, i.e. progressively along a timeline. We enter school as young children with certain capabilities and some experience, acquired in our home environments. As we progress through the levels of education we interact with other learners and teachers, interact with materials such as textbooks and perform actions. As a result of our interactions and actions we acquire knowledge, skills and attitudes that should equip us to be productive members of our societies, communities and families, to live harmoniously with others and to carry on learning and adapting to our changing environments. However, whilst as individuals we experience education along a timeline continuum, communities, nations and societies witness successive education cycles on successive generations of learners. A historical perspectives show us how the processes and outcomes of education act on the broader social, cultural, economic and political context.

Two main schools of thought can be traced within the GMR2005 framework. One is the school effectiveness models that have been developed by Schereens (1992, 2000), amongst others (e.g. Creemers, 1994; Heneveld, 1994a; Sammons, et al., 1995). These have been reviewed elsewhere by EdQual researchers (Yu, 2006). The other influence is the framework adopted by UNICEF (2007) and the Global Campaign for Education (GCE, 2002) based on a learner-centred view of

education quality. It is organised around the five dimensions of what students bring to learning; environments (are they healthy, safe, protective and gender-sensitive?); content (are curricula and materials relevant?); processes; and outcomes. GCE (2002:4) included a sixth dimension of responsiveness explained as being responsive to individual learning needs of learners, being responsive to local needs of communities and being accountable to parents, communities and taxpayers for education outcomes.

UNAIDS also places the learner firmly at the centre of its framework for considering HIV&AIDS in relation to quality education (see figure 3) and raises a similar set of questions. At the level of the learner it asks that an education system seek out learners; acknowledge what the learner brings; provide a conducive environment; consider the content and enhance learning processes. At system level, it asks questions of policies, legislation, resources, outcomes, management and administration.

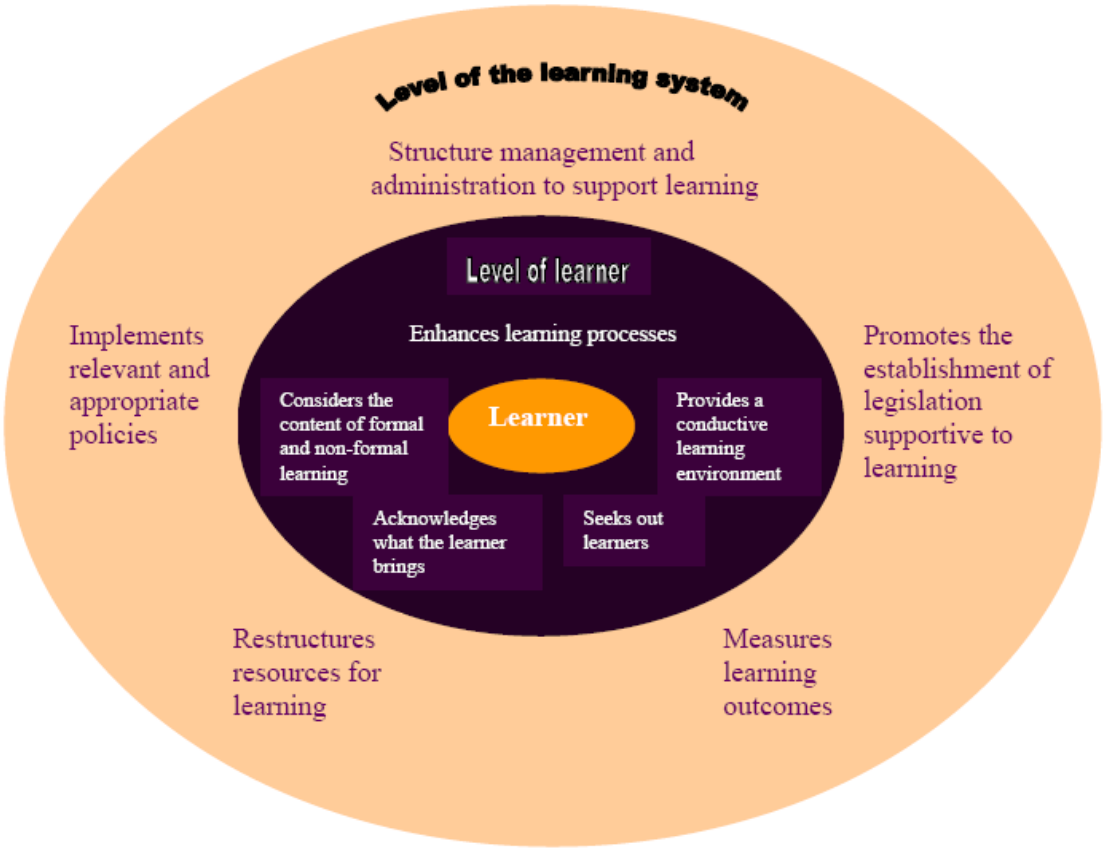

Figure 3: Framework for considering HIV&AIDS and the quality education (Inter-Agency Task Team (IATT) on Education, 2006:9)

Learner-centred frameworks such as that developed by UNICEF and UNAIDS ask searching questions about how well our education systems are meeting the needs of particular groups of disadvantaged learners. However, in privileging learners' needs both frameworks tend to atomise learners, rendering them as independent units isolated from the economic and social forces that influence what they bring to learning and their experiences of schooling. A few less mainstream perspectives on education quality do attempt to locate learners within communities. At the level of Early Childhood Care and Education the child is considered together with his/her carers and community. Hence, Myers (2004:16) includes "the quality of relationship between an ECCE programme and its immediate environment of parents and community" in his four dimensions of quality. Education for Sustainable Development (ESD) is growing in prominence and demanding that a quality education contribute to the capabilities of future generations as well as today's

learners (Barrett, et al., 2006:17). Influenced by capabilities and livelihoods approaches, ESD focuses on what education does for households and communities. The themed section on ESD and education quality in this conference convened by Jutta Nikel and Kelly Teamey is breaking new ground in exploring how quality education addresses issues such as environmental sustainability, intergenerational justice and responsibility.

1.2 Limitations of Process and Learner-Centred Frameworks

Elaborated progress models of education such as the GMR2005 framework and those developed by school effectiveness researchers provide us with powerful tools for reflecting on how educational outcomes are influenced by educational processes, the resources invested in education and the broader context. However, as with any model, they have their limitations. Process models tend to assume a technical approach to analysing education quality that does not make explicit their normative basis. This is in contrast to the learner-centred frameworks that take a human-rights approach to understanding education quality as their starting point, leading them to focus on the rights of the individual child to have her/his basic learning needs met. We hold that a framework for conceptualising education quality is necessarily guided by educational values and, as far as possible, these should be made explicit.

A strength of the GMR2005 framework is its recognition that processes and outcomes are both suffused by broader contexts and act on those contexts. In designing interventions to be implemented in specific local contexts, it is absolutely essential that issues of education quality should be contextualised in relation to local contexts and the lived realities of learners and educators. This may mean that frameworks for conceptualising education quality designed for international audiences need to be refined or re-designed for application in local level initiatives. Even national-level reform or interventions need to be refined by managers and educators who are responsible for its implementation in specific local contexts. As the local, national and international context for education is not static and always in flux, a framework for education quality also needs to be suitable for analysing change processes, including the way that quality initiatives are developed and implemented.

We have seen how human-rights based attempts to conceptualise education quality tend to atomise individual learners. We still lack a framework that can usefully facilitate an analysis of how educational processes impact on outcomes for different groups of learners in different settings. One of the greatest challenges of tackling poverty in the African context is the often multiple forms of disadvantage faced by learners and the way that issues of class, gender, rurality, 'race', ethnicity and disability often intersect. Unpacking the impact of quality on these multiple forms of disadvantage has methodological implications. In taking account of the needs of both groups and individuals, concepts of quality need to avoid essentialism and an overly homogenous view of group and individual identities. Rather, they need to recognise and address multiple forms of disadvantage.

Whilst recognising interaction with context, the EFA in general tends to shy away from an analysis of the broader historical and socio-economic contexts in which educational processes are situated. We hold that such an analysis is necessary for two reasons. Firstly, a critical understanding of how the colonial histories and current neo-liberal policies constrain the quality of education in low income countries is a necessary starting point for advocating changes to international and national policies that will enable sustainable improvements to education quality. The second reason is that some educational goals are determined by international and national level policy makers' aspirations for development and their understandings of how globalisation is changing work opportunities for youth.

1.3 Summary

Our analysis of frameworks that are currently influential within the international EFA movement has highlighted what we believe are the critical features of a framework for conceptualising education quality. We will expand on these with particular reference to the context of sub-Saharan Africa in the next section, showing how these concerns have influenced the design of EdQual's programme of research.

SECTION TWO: TOWARDS A CRITICAL APPROACH TO RESEARCHING EDUCATION QUALITY IN AFRICA

In this section we set out an overall view of education quality based on the above critique of existing models and related to our overall purpose. We do not pretend that this is the only possible approach to conceptualising education quality but it is one that we feel is relevant for the contexts that we are seeking to address and is commensurate with our overall view of development, of capacity building and of the research process. Our approach may be summarised as follows:

1. it has an explicit value bases;
2. it relates issues of quality to an understanding of the broader historical, socio-economic, political and cultural context within which they are embedded;
3. we are concerned with understanding the role of education systems in both perpetuating and overcoming inequalities including those based on gender, class, 'race', ethnicity, language, religion, urban/ rural location, disability;
4. our approach is grounded in an analysis of local realities and the understandings and perspectives of learners, practitioners and the communities they belong to;
5. we focus on the processes of teaching and learning and how these impact on the outcomes for different groups of learners;
6. we focus on understanding the change process itself including the local conditions for realising change;
7. we seek to empower policy makers, educators, learners and other key role players through supporting their development as reflective practitioners and agents of change; and
8. we are self reflexive and self critical concerning our own role as education researchers interested in Africa.

In the rest of this section, we elaborate on each of the above in turn showing how these aspirations are practiced through the EdQual programme.

2.1 The Value Basis of Our Approach

Education quality is not a neutral concept and any model of education quality needs to be explicit about its underlying value base (Carr, 1995). The values that underpin our own approach are that:

- A quality education should empower individuals and groups to realise their human rights and their rights as citizens of a particular nation;

- A quality education should extend the capabilities of individuals and groups (Sen, 1999);

- Any understanding of education quality in SSA needs to be grounded in the realities and perspectives of African-based policy makers, researchers, practitioners, learners and communities.

2.2 Relating Education Quality to the Broader Context

As we have stated above, we are aiming for a conceptual framework that relates issues of quality to an understanding of the broader historical, socio-economic, political and cultural context and is grounded in the specific contexts of sub-Saharan Africa. These elements of the broader African context that we see as key to understanding education's role in realising social justice goals have been detailed by one of the authors elsewhere (see Robertson et al, 2007, chapter 10). Here, we restrict ourselves to a brief summary. Africa is being left behind both economically and in terms of human development. If Africa is being integrated into the global economy, this is not happening in ways that are beneficial to the majority of the population. Africa's share of world trade fell from 6% in 1980 to less than 2 % in 2002 and an estimated $15 billion a year departs Africa as 'capital flight' (CFA, 2005). Extreme poverty has doubled from 164 million people in 1981 to 314 million in 2005 (World Bank 2005: xx). Political instability and insecurity plays its part in these appalling figures. In 2000, 20 out of 45 SSA countries were directly involved in armed conflict and an estimated 14 million people were uprooted from their homes by conflict (Obidegwu, 2004:2).

Such statistics mask differences between and within countries. The EdQual programme includes South Africa, often considered to be a middle income country and Ghana, a country that some predict will achieve middle income status in the near future. Different countries adopt different developmental pathways. South Africa is seeking to develop high end, value added production industries including, for example the auto industry. Another country included in the EdQual programme, Rwanda, hopes to 'leap frog' industrialisation by focussing on service sectors including tourism, financial services and communications. By contrast, Tanzania is committed to developing heavy industry (Tikly, et al., 2003).

Where emphasis is placed within debate on education quality for a given country depends on its current situation and its changing development goals. For example, both post-Apartheid South Africa and post-conflict Rwanda are re-writing curricula to represent the values of a new regime and promote peace and security. Industialised South Africa's new curriculum is also designed to develop important attributes of a flexible workforce - competencies, responsibility and lifelong learning (Barrett, et al., 2006). EdQual's Implementing Curriculum Change project supports teachers to deliver new curricula in South Africa, Rwanda and Pakistan. In Ghana, Tanzania and Rwanda, the majority of the population are dependent on agriculture or the informal economy. For these countries there is a tension between focussing on basic education for the reduction of poverty and the enhancement of social equity, and an emphasis on higher levels that prepare people for employment in service industries and enable those in agriculture, health and other sectors to make use of new technologies (Tikly, et al., 2003). One of the issues that the Leadership and Management project is exploring with headteachers in Ghana and Tanzania is their leadership role with respect to local poverty alleviation.

2.3 The Role of Education Systems in Perpetuating and Overcoming Inequalities

Attention also needs to be given to the large differences in terms of development within countries, a theme also explored in more depth in Robertson *et al.* (Robertson, et al., 2007: chapter 10). This is reflected in figures relating to the growing problems of social inequality and exclusion on the continent taken from the recent CFA (2005) report. Despite being responsible for 80% of agricultural production and all household production, women are still have fewer opportunities to generate income. They accumulate more of the burden of care and are less likely to attend school. Africa is also the continent with the highest proportion of young people. Stagnant economies with high unemployment combined with HIV and AIDS have left this large generation especially vulnerable. This vulnerability is particularly evident in the urban slums, where youth unemployment was 56 per cent in South Africa in 2000. EdQual's Implementing Curriculum Change project is focusing on this particular disadvantaged group in South Africa through carrying out action research

as professional development with secondary school teachers working in challenging township schools. Rapid urbanisation is also seeing growing numbers of street children. The growing orphan crisis is one of the critical challenges emerging. One of the findings to emerge from secondary analyses of SACMEQ data by EdQual's School Effectiveness and Educational Quality (SeeQ) project is that Year 6 children living with both their parents achieve significantly better than those living in other arrangements. This finding implies that orphans, including those who have lost or been separated from just one parent, are vulnerable in terms of the quality of education they receive. This is an example of a finding that the Leadership and Management project can explore further in the specific local contexts in Tanzania.

There are 50 million disabled people in sub-Saharan Africa. Governments are just beginning to recognise the full extent of their responsibilities with respect to the inclusion of disabled children in public schools. EdQual is funding a small scale project that is working with a national NGO to develop an index of inclusion for Tanzania. Rurality is another key dimension of social inequality in many African countries, yet remote schools are often overlooked by education research because they are relatively expensive and time-consuming to visit. The Ghanaian team leading the Leadership and Management project has invested extra funds and researchers' time to ensure the inclusion of schools from Ghana's poorest and most remote regions in every stage of the research.

Impact of privatisation and marketisation on education quality

Following the relaxation of nationalist protective policies, including the liberalisation and marketisation of education, the quality of education people can access is increasingly being mediated by the private sector. As Ilon (1994) predicted, a global elite send their children to schools, either in Africa or overseas, that are comparable to the private schools in Western countries. A middle tier of parents send their children to local fee-paying private schools (sometimes calling themselves 'international schools') that use European languages as the medium of instruction. State education is rapidly becoming a poor quality third tier, the last resort for poor urban parents and the only choice for rural parents who prefer not to send their children away to urban centres. These schools will at best, make their children "marginally competitive for low-skill jobs" (Ilon, 1994:102). A fourth tier of children for whom the market does not cater or governments make provision for are further marginalised by extreme remoteness, extreme poverty, disability, nomadic living, conflict, political instability, abuse or neglect at home, are unable to access education in any shape or form. EdQual's Rwandan team has deliberately chosen to work with a selection of government schools and private schools, including a school managed by the Forum for African Women Educationalists (FAWE), to allow comparison and sharing of experience across private and public sectors.

Digital divide

A key issue relating to education quality in the global era is the need to address the growing digital divide in African education. Africa significantly lags behind the rest of the world in terms of popular access to technology (Robertson et al, 2007)[2]. NEPAD, in particular, makes proposals to address the digital divide that the CFA reiterates and there are several NEPAD initiatives in the area of ICTs as well as a range of similar initiatives[3]. There is a growing consensus about the potential benefits

[2] In this regard, as Butcher has pointed out, of the 818 million people in Africa, 1 in 4 have a radio; 1 in 13 have a television; 1 in 35 have a mobile; 1 in 40 have a fixed line telephone; 1 in 130 have a personal computer; I in 160 use internet; 1 in 400 have a pay TV. (Butcher, N. (2001) *Technological infrastructure and use of ICT in education in Africa: an overview, (Paris, Association for the* Development of Education in Africa).

[3] Besides the NEPAD e-school initiative there are several other initiatives: *Catalyzing Access to ICT in Africa (CATIA) (http://www.catia.ws); Global E-school and Community Initiative (http://www-*

of ICT use in supporting more student centred, problem based and collaborative approaches to teaching and learning and to assessment (Haddad & Draxler, 2002; Hawkins, 2005). However, to achieve these benefits and to transform learning, ICT use has to be integrated into national policy and into practice in schools. In this respect, according to UNESCO, most African countries are still at the 'emerging' stage of development (Farrell & Wachholz, 2003) and the upshot is that many learners continue to be denied access to even basic ICT skills[4]. A focus for the Use of ICT in Basic Education project is to understand how teachers with limited training themselves can be empowered to make best use of existing ICT resources to raise the achievement of disadvantaged learners.

2.4 An Understanding Grounded in Local Realities

There has been a tendency in Africa to contrast the extremes of didactic performance pedagogic practice with learner-centred methods. The general conclusion tends to be that Africa's teachers are over-reliant on authoritarian 'banking' methods and therefore need training in more learner-centred practices. Here we use the term 'performance pedagogies' in the Bernsteinian sense to denote an emphasis on reproducing ('performing') a specified text ('knowledge') or procedure ('skill'). Assessment is about correcting deficits in learners' outputs. Teacher autonomy is low as sequencing and pacing of teaching is prescribed by a rigid syllabus (Bernstein, 2000). Learner-centred approaches are associated with the constructivist view of learners as active and creative in constructing meaning. Teachers are cast as facilitators and assessment as celebration of learner creativity. There is an underlying assumption of a "universal democracy of acquisition" (Bernstein, 2000:43) that fits well with democratic and inclusive goals.

However, a simple dichotomy between authoritarian performance pedagogies and inclusive learner-centred practices does not do justice to the range of practices within Africa. Croft (2002) and Barrett (2007) both describe examples of inclusive and interactive teaching that depend on little or no material resources and are influenced as much by local pedagogic traditions as externally-funded 'improvement' interventions. In South Africa, Nakabugo & Siebörger's (2001) observations lead them to conceive of a continuum of possibilities between teacher-centred and learner-centred teaching and Brodie *et al.* (2002) describe two individuals on their in-service programme who they considered to be "good teachers" even though they did not take up learner-centred techniques. However, in our view there is a fundamental difference (if not a dichotomous one) between a behaviourist view of learners as passive that leads to a focus on knowledge and how it is taught and a constructivist view that requires teachers "view curriculum and pedagogy from the perspective of the learner and to build bridges to meet that view half way" (Little, 2006:340).

Initiatives to improve the quality of teaching and learning should move teachers towards learner-centred practices in this non-radical sense by equipping them with strategies and materials that can be implemented within their environments. These environments include over-sized classes approaching or exceeding a hundred pupils; parental and institutional pressure to 'teach to the exam', where end of cycle examinations select for the next educational level; a colonial history in which corporal punishment and humiliation were ingredients of a 'civilizing' education (Hirji, 1980); traditional values of age-hierarchy (Tabulawa, 1997) and traditional leadership models (Oduro & MacBeath, 2003); rigid syllabi and inspection practices premised on uniform progress through the

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wbweb4.worldbank.org/disted/); Leland Initiative- Africa Global Initiative(URL:http://www.usaid.gov/regions/afr/lelnad/).

[4] Related to the above point is that older, non-digital ICTs also have an important role to play in supplementing teacher knowledge and providing increased opportunities for disadvantaged learners. Whilst digital technologies might transform education in the longer term, an exclusive focus on newer ICTs is likely to disproportionately benefit elites who have access to them and have the effect of exacerbating the digital divide at least in the short term.

syllabus; low teacher salaries and little incentive to invest in careful lesson planning and preparation. None of these factors necessarily prevent teachers from using interactive and inclusive practices based on a constructivist view but they do present challenges. Perhaps the greatest challenge, however, is moving teachers who themselves were educated and trained mainly through performance pedagogies towards a (non-radical) constructivist view of teaching and learning.

The four EdQual projects that are working closely with teachers and headteachers aim to support them to develop strategies to implement national curricula and educational policy within their own particular classroom environments. For example, the Use of ICTs project in Rwanda is helping teachers to use the hardware and software that has already been installed in their schools to enhance the teaching and learning of science and mathematics. In some schools, this means designing lessons that make the most of a computer laboratory where two students can sit at a single computer. In other schools, it means helping teachers to make the most of the only computer in the classroom. Although the Language and Literacy project aims to influence policy makers to reconsider policy on language of instruction, the research involves working with teachers to use bilingual strategies to support learners at the point of transition in language of instruction. The new curricula in maths and science that are being introduced in South Africa, Rwanda and Pakistan are all to some extent based on learner centred and constructivist assumptions and approaches. The challenge for the Implementing Curriculum Change project is to better understand the impact of these approaches on different groups of learners and also on how these approaches can be successfully implemented in difficult and diverse delivery contexts. Headteachers involved in the Leadership and Management project will be supported to assess and improve quality in contexts of remoteness or overcrowding.

2.5 Teaching and Learning Processes and How These Impact on the Outcomes for Different Groups of Learners

Learning outcomes for girls and young women

There is evidence from the wider literature that improvements in the quality and relevance of education can ultimately have a beneficial impact on enrolments and on continuation rates (Bergmann, 1996; Lloyd, et al., 2000). However, issues of access in the African context are increasingly complex and affect some groups more than others. For example, in Africa girls can expect to stay in school for only six years compared to eight years for boys (UNESCO, 2002). Poor educational outcomes and low participation rates become more pronounced at the secondary and tertiary levels and in vocational education. Lack of access for girls and women are intimately bound up with issues of quality. The establishment of a safe, girl-friendly school environment is crucial to attract girls to school and keep them there. Girls and women are more likely to experience gendered abuse in African schools (Leach, et al., 2003) and teenage girls may expose themselves to sexual risk in order to fund their education (Vavrus, 2003; Vavrus, 2005). Basic infra-structural concerns such as the provision of separate toilets have been the focus for some time (UNESCO, 2005) but attention is now shifting to a broader notion of a 'safe' environment that includes protection from violence and sexual harassment (Aikman & Unterhalter, 2005). This must include the development of gender awareness amongst staff and boys in schools leading to equality of respect for girls and women and the introduction of curricula and learning materials that are gender-sensitive and meet the needs of girls as much as those of boys (Oxfam, 2005). Gender equality is a cross-cutting focus for all EdQual's projects but a particular focus on the Implementing Curriculum Change project that aims to develop teaching and learning strategies for science and mathematics that promote gender equality in the very different contexts of South Africa, Rwanda and Pakistan. The Leadership and Management project has collected data on headteachers' attitudes to gender equality that will feed into the design of instruments by headteachers for measuring school quality.

Inclusion

Developing inclusive strategies (such as an index of inclusion) that will meet the needs of these children and facilitate their participation involves developing a whole school approach that addresses key areas of quality including leadership, organisational culture, the curriculum and teaching and learning and community links. This is a focus for one of the EdQual small scale projects which is initiating an index of inclusion in Tanzania.

Language policies for multilingual societies

The cultural and linguistic diversity of African means that, with a very few exceptions (Rwanda, Burundi), within a single country tens, or in some cases hundreds, of languages are spoken as first language. As a consequence a European language (English, French or Portuguese) or the language of a particularly large or influential tribal group (e.g. the tribal group that occupies the region in which the capital city is located) is used as the lingua franca. In the past, education systems have tended to select one language, nearly always a European language (as tribally neutral), as the medium of instruction. However, in recent years there has been a shift towards the adoption of bilingualism and in particular the use of mother tongue (L1) for the first few years of primary education within countries where a significant proportion of the population speak a minority language. These changes are driven by research evidence that suggests that children acquire linguistic and cognitive skills more readily in their first language and are then able to transfer these to a widely-used language (L2). The EdQual project on Language and Literacy Development is aimed at developing new learning materials, teaching strategies and related school-based professional development for teaching through the medium of L1 and L2 that will be practically useful in bilingual environments (Rubagumya, et al., 2007).

2.6 Understanding the Change Process

A key aim for EdQual is to assist policy makers in implementing change. Whilst we seek to develop and pilot new initiatives in our chosen research areas we are also keen to develop guidelines for their mainstreaming or scaling up. As Samoff et al. (2003) point out in their comprehensive review, scaling up of pilot initiatives is a common approach to implementing change in the African context but one that often fails. One of the key reasons they cite is a limited understanding of the processes of implementation. They argue that 'rather than replicating the specific elements of the reform, what must be scaled up are the conditions that permitted the initial reform to be successful and the local roots that can sustain it' (p.2). They go on to list key factors linked to successful scaling up, factors that are reflected in the broader change literature. These include a committed, dedicated leadership; clear and sustained local demand and ownership; clear initial focus on a single goal or service; sufficient, though perhaps very modest, funding; strong, direct, local involvement coupled with effective participatory training; understanding pilots as learning experiences; flexible, iterative planning; competent technical analysis, including sound assessment of the feasibility of implementation; clear standards of practice and accomplishment, with appropriate and reliable monitoring and reporting results; clear accountability for the results. They also go on to list a series of facilitating factors and conditions that support change. These include the ongoing commitment of leaders and their ability to re-focus attention to expansion and its requisites; securing on-going ownership and involvement in the change process and finding ways to acknowledge, reward and celebrate this (motivating change agents); developing strong networks to sustain change and providing simple information systems to assist in monitoring change. A key challenge for EdQual is to understand how these broad prescriptions apply to local settings and innovations. In this respect the majority of projects can be classified in one way or another as being intervention studies with a key focus on monitoring the change process itself.

2.7 Building Capacity for Change

If we are serious about seeking to use education to extend learners' capabilities and to emancipate groups that are currently disadvantaged within our societies, then we must extend a similar ambition towards educators, local communities, policy makers and policy influencers. We have outlined our commitment to a human centred view of capacity building in the introduction. However, there are instrumental as well as ideological reasons for a commitment to capacity building at all levels. Samoff *et al.* (2003) remind us "that scaling up success stories rest on both systemic and specifically local elements."

Developing leadership for change

As Samoff et al note, sustaining the commitment and building the capacity of leaders for change is critical to success. Commitment and ownership of leadership at a national level must be coupled with a range of capabilities required to successfully initiate, implement and institutionalise change. Key here is the ability to understand the main indicators of education quality in different contexts and for different groups of learners and to be able to effectively monitor and evaluate these. The EdQual SeeQ project will contribute to this process through developing contextually relevant models of school effectiveness based on a secondary analysis of the SACMEQ II data set and feeding the findings back to policy makers.

Within increasingly decentralised systems, however, local leadership becomes particularly significant for realising quality improvements. As recent research has highlighted, however, effective leadership for change at the local level in Africa can take different forms to that in the west (Bush & Oduro, 2006)(Ngcobo and Tikly, 2005) and involves the complexities of engaging with local realties, engaging communities and taking account of local cultural norms and values. Effective leadership at the local level is also 'distributed', engaging political, religious, cultural and other forms of community leadership as well as developing the leadership potential of teachers and learners. The Leadership and Management project seeks to provide greater insight into these processes at a local level and to relate these to the successful implementation of quality improvements.

Empowering educators

EdQual interprets local contexts as posing specific challenges to both the outputs and process of research. Any outputs that we expect to be taken up and mainstreamed at a national level should not be demanding of teacher time and energy, should be implement-able in overcrowded, simply-resourced classrooms and should not require an in-depth knowledge of subject matter or educational theory to implement. On the other hand, the benefits of their implementation should be as immediately evident to teachers, learners and local communities as they are to middle and higher level administrators and decision-makers. In terms of the research process, it is essential to involve practitioners in the development of these outputs and to extend the professional competencies of the practitioners with whom we are working directly. Hence, several of EdQual's projects employ action research methodologies. The Implementing Curriculum Change project is using collaborative action research (CAR) to develop strategies for delivering outcomes-based curricula (Luneta, et al., 2007). The Use of ICTs in Basic Education project similarly works closely with teachers to extend and develop competence and confidence in using the technologies that already available to them in their schools to improve the quality of teaching and learning in their classrooms (Were, et al., 2007). The Leadership and Management of Change project will support a small number of teachers through action research cycles to develop a school self-evaluation tool (Oduro, et al., 2007).

Empowering communities

Samoff et al. (2003) also remind us that "Local communities and their leaders … as well as teachers, students, and parents, can and do oppose change". Conversely, there is evidence (Tikly and Ngcobo, 2005) that early engagement of the community in the change process can have a beneficial impact on change in multiple ways beyond the traditional emphasis on mobilising resources, e.g. through empowering parents to assist in their children's learning; through mobilising communities behind the change; through making leaders more accountable; through providing outreach and basic education programmes in the community itself; through making the school building a 'development hub'. Some EdQual projects also aim to create space for dialogue with communities over the meaning and implementation of education quality. For example, one small scale projects seeks to understand the role of the school building as a 'development hub' whilst another seeks to explore the role of the NEPAD e-school initiative in supporting community empowerment.

2.8 Our Position as Researchers

Reflexivity on our role as education researchers in Africa is practiced by EdQual researchers in the context of international collaboration between African researchers based in African partner institutions and researchers based in the two UK universities of Bristol and Bath, Chile and Pakistan. The UK-based researchers include researchers who have maintained an interest in Africa throughout their careers and a personal connection with an African country as well as researchers involved in research in Africa for the first time. This paper is part of the ongoing process of reflecting on the value-basis of EdQual in relation to substantive research issues and research processes. Equally important is critical reflection on structures and processes of programme management including the empowerment of researchers and research institutions. Leadership and management within EdQual is distributed, with each of the four African institutions leading one project, from conceptualisation and design onwards. Southern leadership has resulted in each project being immediately relevant to the current educational policy concerns and quality debates in the lead country. This has facilitated research communication as projects are designed to address policy makers' and practitioners' concerns. Project ownership means that local researchers, who are fully engaged with educational debate and policy narratives within their own countries, are motivated to communicate their research.

UK researchers are placed in a position of being a resource for their African colleagues, who can draw on their expertise and request their participation in certain research activities. Whilst overall directorship of the programme is located in the University of Bristol, this has been a new and sometimes challenging position for the UK researchers, demanding critical self-reflection and judgment. On the other hand, African researchers leading or participating in a project have had to learn new skills of project design and leadership at the same time as forging new partnerships with collaborators in other Southern research institutions. To complicate matters further, communications infrastructure has often meant that communication between researchers in different African countries needs to be routed through or facilitated by a UK partner. Projects have been obliged to find innovative ways of sharing information, ranging from use of web-based technologies to delegating a UK researcher to make regular telephone calls.

Empowerment of educators has been discussed above. The same principle extends to researchers and partner institutions. Distributed leadership is one example of how capacity building is practiced. Another is through the involvement and, wherever possible, deliberate pairing of more and less experienced researchers in every step of the research process. South-South learning is as important as North-South. As well as sharing of expertise between African institutions, associate partners based in Pakistan and Chile play an important advisory role on certain projects. EdQual has sponsored ten doctoral studentships with the universities of Bristol, Bath, the Witswatersrand,

Johannesburg and Dar es Salaam enrolling these doctoral students. Candidates have been nominated by African institutions and selected for the long term contribution they are expected to make as academic staff of these institutions. Their research topics supplement EdQual's projects.

SECTION THREE: CONCLUSION: PUTTING A CRITICAL UNDERSTANDING OF EDUCATION QUALITY INTO PRACTICE

In this conclusion we condense our critique of education frameworks and presentation of the EdQual's programme into three main points. First we have explained that EdQual's research focus is on the processes of teaching and learning within classrooms and the processes of leadership and management within schools. This is because of our position alongside two other DFID-funded RPCs running concurrently, one concerned with access and the other with outcomes.

Secondly, we have stated that understandings of education quality are necessarily value-laden and therefore it is necessary to make our own value basis clear. This paper is an attempt to lay out a value basis whilst recognising that constant self-reflexivity and dialogue between partners as well as responsivity to emerging findings means that our values are always subject to scrutiny and review. Our belief that a quality education should extend capabilities and empower individuals, institutions and groups has implications not only for how we understand substantive issues but how we conduct research. Hence, capacity building is a key feature of our programme and integral to all research activities. So far we have realised this principle through:

- Southern leadership of the majority of our research projects;
- creating professional development opportunities for less experienced researchers that enhance their contribution to institutional capacity;
- employing action research methodologies that recognise, develop and utilise the capacity of practitioners to innovate; and
- building relations with policy makers to enhance capacity to take up research findings.

Thirdly, we have asserted that a critical understanding of education quality must simultaneously be grounded in an analysis of local realities and related to analysis of how the broader historical, socio-economic, political and cultural context interacts with educational processes. This requires that learners are viewed as located within societies, communities, families and groups, which may face multiple forms of disadvantage resulting from the way that issues such as gender, rurality, ethnicity, economic and physical vulnerability intersect. This principle has been enacted through the selection of research methodologies that demand dialogue with practitioners and learners together with the implementation of a communications strategy that requires dialogue with policy makers from the outset.

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EdQual RPC
- Implementing Education Quality in Low Income Countries

Contact:

EdQual RPC
Graduate School of Education
35 Berkley Square
BRISTOL BS8 1JA
T 0044 (0)117 331 4288
F 0044 (0)117 925 7584

www.edqual.org

University of BRISTOL