

Transition to School: Reflections on Readiness

Caroline Arnold

Aga Khan Foundation
Geneva, Switzerland
caroline.arnold@akdn.org

Kathy Bartlett

Aga Khan Foundation
Geneva, Switzerland
kathy.bartlett@akdn.org

Saima Gowani

Aga Khan Foundation
Geneva, Switzerland

Sadaf Shallwani

Aga Khan Foundation
Geneva, Switzerland

Abstract: *Although globally primary school enrollment has increased dramatically in recent years, primary school completion rates remain disappointing. In many countries, the highest rates of dropout and repetition are at the Grade 1 level. In such a context, it becomes critical to examine children's entry into, adjustment to, and success in their earliest years of primary school—in other words, children's transition to school. This paper explores the notions of transition and readiness in international contexts, with a focus on the Majority world. It considers children's readiness for school, schools' readiness for children, and the challenges around both. Examples of policies and programs that appear promising in supporting children's successful transition are highlighted. As part of this, the paper draws upon the experiences and lessons learned of the Aga Khan Foundation (AKF) in early child development and school improvement efforts in the Majority world. Lastly, implications for policy and practice are explored.*

Transition to School: Reflections on Readiness

Why is it important to give attention to children's transition into school? The answer is quite simply that

Note: This paper draws upon and updates a background paper by C. Arnold, K. Bartlett, S. Gowani, & R. Merali (2006), *Is everybody ready? Readiness, transition and continuity. Reflections and moving forward*, commissioned for the EFA Global Monitoring Report 2007, Strong Foundations: Early Childhood Care and Education.

this is the time when systems fail children the worst and that is most urgently in need of attention.

Access to primary education has increased dramatically across the Majority world.¹ In Uganda, for example, following the introduction of free universal primary education in 1998, enrollments increased from 2.6 million to about 7 million in 2007 (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2007). In many countries, Grade 1 class sizes in particular have mushroomed—reaching 100 or more children of widely varying ages and levels (Abadzi, 2006). Particularly in the poorest countries, this has resulted in a very challenging Grade 1 learning environment, with overcrowded classrooms, very high teacher-child ratios, lack of learning materials, lack of tables and chairs, and even lack of space to stand.

According to the most recent Education for All Global Monitoring Report (EFA GMR) 2008 (UNESCO, 2007), some 72 million primary-school-aged children globally are not in school. Even while the vast majority of children do enroll in school, many do not complete the primary cycle. Globally, one out of eight children (13%) does not

1. The term "Majority world" is used in preference to terms such as "developing world" or "Third world" due to the negative connotations associated with these terms. The term highlights the fact that the majority of the world's population lives in these countries.

make it to the last grade of primary school, and in Sub-Saharan Africa the rate is more than one in three (37%) (UNESCO, 2007). Statistics from Uganda reveal how little primary completion rates have changed from 2000 to 2006 (Uganda Ministry of Education and Sports, 2007). Grade 1 enrollments have increased significantly, but one third (32%) of those who enroll drop out during their first year (UNESCO, 2007). More students continue to leave gradually right through primary school, with only half of those who enter eventually completing (UNESCO, 2007). The on-time completion rate is only 3% (Cameron, 2005; Uganda Bureau of Statistics & ORC Macro, 2002). Similarly, in rural areas of Latin America, two out of every five children fail to finish primary school, and students repeat at least two years of school over the span of basic education (UNESCO, 2004). In Cambodia, government data (Cambodia Ministry of Education, Youth, & Sports, 1999) reveal some of the lowest levels of efficiency. A student spends an average of more than 14 years to complete the six-year primary cycle.

Analysis of grade-disaggregated data demonstrates that the real crisis is in the early years. Drop-out rates are highest in Grade 1 (UNESCO, 2007). In many countries, high levels of drop-out are often combined with even worse repetition rates. A background paper (Arnold, Bartlett, Gowani, & Merali, 2006) for the 2007 EFA GMR looked at data from the 2006 EFA GMR (UNESCO, 2005). The data from Guinea-Bissau, Rwanda, Equatorial Guinea, Madagascar and Nepal showed that more than half the children who enrolled either repeated first grade or dropped out. For many of the countries for which dropout information was available by grade, Grade 1 dropout rates were at least double those in Grade 2. In South Asia, children were three times as likely to drop out of Grade 1 as compared to Grade 4. Even in Latin America—where good progress toward the EFA goals had been made, there were areas with poor outcomes. For example, 19% dropped out in Colombia before completing Grade 1, and 31% of children in Belize repeated Grade 1. There are also disparities within countries. In India, nationally, 12% of students dropped out in Grade 1 from the 2003–2004 cohort (Mehta, 2005). In the state of Rajasthan, dropout rates were almost double this (21%), whereas in Kerala, the figure was only 2%. Similarly, repetition rates in Grade 1 for the two states are 20.3% and 0.3%, respectively. Completion of primary education is a core milestone. Yet, the fact is that it is during the first year when the vast majority of young children actually drop out in large numbers.

Many of those who remain in school become established in persistent patterns of under-achievement and leave school unable to read fluently, calculate, or solve

problems (Arnold et al., 2006). Research suggests that if children cannot read after about three years of education they probably never will (Abadzi, 2006). They may be promoted regularly and complete school but they will be functionally illiterate (particularly in countries with automatic promotion policies), and their many years of education will not improve their incomes. Surveys in Peru and Romania, for example, demonstrate that more than half of school graduates are functionally illiterate (Nielsen, 2005). Similarly, governmental national assessments of learning in Uganda demonstrate that 46% of third graders and 50% of sixth graders are not reaching expected levels of competency in literacy (National Assessment of Progress in Primary Education, 2006, as cited in Uganda Ministry of Education and Sports, 2007). In Malawi, 1%, and in Zambia, a mere 2% of students have achieved desirable levels of proficiency by the end of Grade 6 on assessments of the Southern and Eastern African Consortium for Monitoring Educational Quality (cited in 2005 EFA GMR—UNESCO, 2004). Along the same lines, a survey of learning achievement in 549 districts in India found that 47% of Grade 5 children could not read a story text at a Grade 2 level of difficulty (Pratham, 2007).

The crisis in education occurs right at the beginning and yet school improvement programs across the Majority world give little attention specifically to the early years of primary school. Abadzi points out that the failure of the first year or two of school to establish basic literacy skills “creates inefficiencies that reverberate all through the system” (2006, p. 136). This and the consequent failure of school systems to enable all children to become successful learners provide the impetus for this paper and AKF’s attention to transition issues across its programs.

In this paper, the term “transition” is used to refer to the period of time before and after a child moves from either home or an early childhood program into primary school, and the passage from one to the other. Children experience demanding changes during this transition (Arnold et al., 2006; Fabian & Dunlop, 2005, as cited in Fabian & Dunlop, 2007). For the transition to be smooth, children need to be ready for school and, equally important, schools need to be ready for children (Consultative Group on Early Childhood Care & Development [CGECCD], 1991; Myers & Landers, 1989). Thus, transition and readiness are closely related.

This paper explores the notions of transition and readiness in international contexts, with a focus on the Majority world. It considers children’s readiness for school and schools’ readiness for children and the challenges around both. Examples of policies and programs that appear promising in supporting children’s successful

transition are highlighted. As part of this, the paper draws upon the experiences and lessons learned of the AKF in early child development (ECD) and school improvement efforts in the Majority world. Lastly, implications for policy and practice are explored.

AKF is part of the Aga Khan Development Network (AKDN). The Foundation focuses on rural development, education, health, environment, and the strengthening of civil society, working primarily in some of the poorest parts of South and Central Asia, Sub-Saharan Africa, and the Middle East. AKF aims to improve living conditions and opportunities, and to empower communities to respond to the challenges of social, economic and cultural change. AKF's Education Program aims to increase access to and the quality of education, particularly for marginalized children. AKF emphasizes building an inclusive and relevant ladder of education opportunities beginning from early childhood and extending through secondary school. Support to selected tertiary institutions promotes professional development of educators and fosters leadership across all levels of education, reinforcing school and community level efforts.

Children's Readiness for School

Children's readiness for school has been conceptualized as the characteristics and skills children should possess in order to be able to learn effectively in school (Janus, 2007). For example, Janus and Offord (2000) describe five major developmental domains: (1) physical health and well-being, which includes physical readiness for the school day, physical independence, and gross and fine motor skills; (2) social competence, which includes overall social competence, responsibility and respect, approaches to learning, and readiness to explore new things; (3) emotional maturity, which includes pro-social and helping behavior, anxious and fearful behavior, aggressive behavior, and hyperactivity and inattention; (4) language and cognitive development, which includes basic literacy, interest in literacy/numeracy and memory, advanced literacy, and basic numeracy); and (5) communication skills and general knowledge.

The early years are critical. They lay the foundation for children's cognitive, personal, social, and physical development (Mustard, 2002; Mustard, 2006). Neurobiological research indicates that the brain develops rapidly during the first few years of life, and that interactions with the environment during this period substantially affect the growth of children's neural pathways (Hertzman, 1999; Mustard, 2006). These differences in brain development may be sustained over the life span, thus result-

ing in systematic differences in developmental health, even in adulthood (Hertzman, 1999).

Children's development and readiness for school, as understood above, is determined and influenced by a number of factors, at the level of the child and in the surrounding environmental context. These include socioeconomic status, the home learning environment, and participation in quality ECD programs.

Socioeconomic Status

Globally, socioeconomic status has consistently been found to be one of the most critical influences on children's developmental outcomes (Bradley & Corwyn, 2002; Brooks-Gunn & Duncan, 1997). Family poverty has been shown to adversely affect children's health, intellectual capabilities, academic achievement, and behavior (Weitzman, 2003). Further, poverty that occurs during infancy and preschool years appears to be more damaging than poverty experienced later in childhood (Brooks-Gunn & Duncan, 1997). Socioeconomic status can impact children's development in a number of ways, including nutrition, educational opportunities, and home environment.

First, the nutritional deficiencies strongly associated with poverty result in poor behavioral and cognitive development in infants and children (Grantham-McGregor et al., 2007). Malnourished children are less engaged in their environments, less active, and have shorter attention spans than their well-nourished counterparts. They are less likely to be enrolled in school, attain lower achievement levels, and have poorer cognitive ability.

Second, in many low-income countries, in Africa and South Asia for example, many poor children never enter school (UNESCO, 2007). Others enroll but are unable to successfully transition into the school environment, performing poorly, repeating grades, or dropping out at high rates (Arnold, Bartlett, Gowani, & Merali, 2007). Throughout their lives then, children from poor families remain at a disadvantage, struggling with employment and income, and continuing to be trapped in a cycle of poverty and difficulty (van der Gaag, 2002; Grantham-McGregor et al., 2007).

And third, children who live in poverty in their early years tend to have more disadvantaged learning environments in their homes. For example, children from poor families generally have significantly less verbal interaction and begin school with less language than peers from higher income backgrounds (Pikulski & Templeton, 2004). Indeed, language is the basic tool for thought, communication, reasoning, and making sense of the world,

and early language experiences lay the foundation for language and literacy development. Children's language levels at the age of three have been shown to predict their abilities at age ten (Hart & Riseley, 2003), and studies demonstrate that children's exposure to print and reading during preschool years is a predictor of language development, reading, and school success (Shonkoff & Phillips, 2000).

Home and ECD Learning Environments

Related to this third point, it is important to note that the home learning environment can have more of an effect on children's development than socioeconomic status. Research in the United Kingdom has demonstrated that activities in the home that offer learning opportunities to the child (e.g., reading to children, teaching songs and nursery rhymes, playing with letters and numbers, having friends with whom to play, etc.) are more strongly associated with children's intellectual and social development than either parental education or occupation (Sylva, Melhuish, Sammons, Siraj-Blatchford, & Taggart, 2004). As the researchers assert, "what parents do is more important than who they are" (p. 1). This suggests that even in contexts of poverty and disadvantage, parents and other caregivers can find ways to give their children a healthy and good start in their early years. Indeed, a number of studies have demonstrated that support and warmth from a caregiver during the early years results in children's greater social competence, fewer behavioral issues, and enhanced cognitive skills in school (World Health Organization [WHO], 2004). Strong and warm caregiver-child relationships build children's resilience and can protect them from the damaging effects of poverty and deprivation (Benard, 2004; WHO, 2004).

Around the world, ECD programs are viewed as an important strategy for addressing the needs of disadvantaged and marginalized children and families (Engle et al., 2007; Myers, 1995; Young, 2002). Quality ECD programs ensure the synergy of protection, good health and nutrition, supportive and affectionate interaction, stimulation, and opportunities for exploring the environment (National Association for the Education of Young Children [NAEYC], 1997). Children who participate in ECD programs do better in school, are healthier, and do better as adults in terms of being economically productive, emotionally balanced, and socially responsible (Barnett, 1995; Barnett, 1998). ECD programs offer value not only in terms of responding to the immediate needs of children and families, but also over time in terms of their ability to contribute to the community and participate in

society (Young, 2002). Research indicates that investment in the early years provides strong returns, both in human (van der Gaag, 2002) and financial (Cleveland & Krashinsky, 1998) terms.

In a global context where at least 200 million children are at risk of not developing to their fullest potential (Grantham-McGregor et al., 2007), it is important to keep emphasizing the critical benefits of ECD programs for both school readiness and long-term outcomes. While governments are more and more recognizing the importance of ECD (UNESCO, 2007), this increased interest has not yet translated into near adequate levels of investment in young children.

Schools' Readiness for Children

Schools' readiness for children is conceptualized as providing an environment in which all children are able to learn. In particular, ready schools are available and accessible, of good quality, and recognize and adapt to local needs and circumstances (CGECCD, 1991). Among other things, good quality includes the availability and use of books and materials, as well as responsive and enthusiastic teachers.

Indeed, research in the Minority world has found that high quality classrooms with integrated learning contribute positively to student outcomes, in reading and math, for example (Rimm-Kaufman, Fan, Chiu, & You, 2007). Research and theory strongly suggest that children's initial academic and social success at school can lay the foundation for their long-term adjustment and progress, leading to a cycle of achievement and success (Fabian & Dunlop, 2007).

However, schools are often not ready for children, in that they fail to provide an environment which enables all children to learn effectively. A number of factors seem to impact schools' readiness for children, including teacher capacity, particularly in the early primary grades; systemic issues with trust, communication, and understanding; bureaucratic requirements; language barriers; and of course large class sizes, overcrowding, and high teacher-child ratios.

Teacher Capacity

There is clear evidence that teachers are a critical factor in ensuring learning and it is important to have quality teaching in the early grades (Bruns, Mingat, & Rakotomalala, 2003; Abadzi, 2006). The experience of AKF and organizations working in education around the world

confirms that early primary teachers tend to be viewed as less important than those teaching higher grades. The availability of motivated teachers who know how to support children's social and emotional development and promote their learning is vital. The teachers' application of skills and competencies, and whether they have access to core teaching and learning materials (e.g., teacher's guides, textbooks), all influence what happens for children and their learning. Many Grade 1 and 2 teachers lack proper training in teaching and promoting literacy skills in order to develop children's fluency in reading and writing. They are also less likely to have had specialized teacher training to help them organize, manage and teach the large and diverse groups of students in their classrooms.

Systemic Issues with Trust, Communication, and Understanding

The lack of familiarity with teachers assigned to schools by a centralized system and the absence of trust in local schools are well documented as critical factors that influence parents' views of education—most particularly for their daughters (Department for International Development, 1999; Odaga & Henevald, 1995; Rugh, 2000). Parents' expectations are not always well understood—nor do teachers seek to understand them in many cases. Where the culture and language of the local community is different from that of the teacher, it can result in misunderstandings that escalate the likelihood of dropout (or “push out”) of students. Teacher absenteeism, often rampant (Abadzi, 2006; CGECCD, 1991), undermines trust and confidence among both parents and students. The formal education system is often threatening, not just to the child, but also to parents who themselves may not have attended school (AKF, 2006). Engagement with parents may be characterized by annual parent meetings or demands for contributions rather than regular and meaningful exchanges between teachers and parents regarding the progress of their children. School calendars and daily timetables often do not allow flexibility to adapt to the realities of the local context and families' needs, such as harvest time or monsoon (Gowani & Tiwari, 2006; Psacharopoulos, Rojas, & Velez, 1993).

Bureaucratic Requirements

Sometimes bureaucratic requirements hinder children's enrollment. For example, many education systems require birth registration documents when children en-

roll. While birth registration is rightly championed as a means to help ensure children's rights, it can be a highly problematic as well—particularly where the process for birth registration is hampered by confusing bureaucratic procedures (which are generally completed in the official language). Where parents have to walk long distances or pay for transport (and sometimes for the document), the process can become too time-consuming and expensive. The attitude taken by the school in such circumstances is critical.

Language of Instruction

The language of instruction is a key factor in children's early learning experiences (Abadzi, 2006; Benson, 2005). Many children enter school unable to understand anything the teacher says. In Malawi, for example, students in Grades 1 to 4 often learn in three or four languages: Chichewa (Malawi's national language), English (the language in which instructional materials are written), the teacher's home language, and the students' home language (Chilora, 2000; Chilora & Harris, 2001). It was found that students whose home languages were the same as their teachers' (even if the language of instruction was different) performed significantly better in primary school. Children learn language rapidly in their early years. Becoming a competent communicator and fluent reader is much easier to accomplish initially using the mother tongue where there is already familiarity and vocabulary. Bilingual programs (official or unofficial) can be effective, but this is difficult, and often impossible, in cases where there are a number of languages in the class. The importance of language of instruction is recognized in numerous studies (Abadzi, 2006; Benson, 2005) as well as in an increasing number of government policy documents and national plans. However, pressure on education budgets means that, although many projects develop learning resources in minority languages, few actually end up in the hands of classroom teachers and children. Even with accumulating knowledge and experience, practices on the ground may not change.

Class Size and Overcrowding

As described earlier, in countries where free universal primary education policies have been implemented, classroom sizes have increased drastically in recent years, particularly in Grade 1. While the impact of large class sizes on student achievement may not be so adverse in later primary years, this is not the case for the early

years of learning. Here results are more consistent: large early grade classes interfere with the capacity of teachers to teach and children to learn (O'Sullivan, 2006). Teaching 75–100+ children in Grade 1 is not an effective way to instill the key skills and competencies that are critical for later learning and success. Overcrowding is combined with little or no access to the learning materials which are critical for the development of basic skills and competencies. The introduction of shifts (to address large class sizes) in some places has resulted in even fewer contact hours (Abadzi, 2006).

Lack of Information

All of these issues are further exacerbated by a severe lack of information and data. Abadzi (2006) describes the lack of clarity regarding what interventions may be appropriate to address poor learning outcomes since so little information exists on performance in lower grades. Standardized achievement tests are usually not given to students until they reach Grades 4–6, when it is more likely that they can respond. Moreover, data disaggregated by grade on enrollment, dropout, repetition, and achievement are often not available. This is needed at the school level in order to use results for school development plans, as well as at wider system levels—particularly for national programs aimed at improving the quality of education.

How Do We Improve the Transition Process?

Children's transition to school presents a critical time and unique opportunity to lay the groundwork for their long-term academic and social success. There are a number of factors which are critical to improving the transition process. First, there is a need for data, in particular, for information on common indicators that can be used to ascertain the situation at a very broad level. Second, there is a need to gather research evidence and draw out best practices from programs around the world which successfully enhance children's readiness for school, schools' readiness for children, and the transition process.

Need for Common Indicators

Very little information is available on children's outcomes in the early primary years. The health sector has long measured child survival using two key points in time: year one (infant mortality rate) and year five (child mor-

tality rate). The rationale is clear—infants are very vulnerable immediately after birth and during the first year of life. Specific strategies for this period (e.g., pre- and post-natal care, immunizations, exclusive breast-feeding, etc.) are the focus of those working with infants and their caregivers. Survival of the first year is a major stepping stone.

It may be useful for the education sector to establish similar indicators of primary school survival. This would involve having data not only on primary school completion rates, but also on Grade 1 survival. Data would need to be collected regularly on promotion rates between Grades 1 and 2, as well as on dropout and repetition rates in Grade 1. Given that the highest rates of dropout and repetition are almost always during the first year, such data are critical. However, it is not easily accessible, even from key reports that look at countries' progress on EFA and Millennium Development Goals (MDG) targets. Only recently did the EFA GMR (UNESCO, 2004) begin to include dropout and repetition rates by grade, although the 2006 EFA GMR (UNESCO, 2005) did not have dropouts by grade. This information needs to be available routinely in order for programs to address the specific issues, such as the programs highlighted below.

Improving Children's Readiness for School— ECD Programs

A number of efforts have been undertaken to support children's readiness to adjust, learn, and succeed in the school environment. As mentioned earlier, ECD programs have been found to improve enrollment, retention, and achievement for children, particularly those from various disadvantaged groups. Studies from the United States (Schweinhart, Barnes, & Weikart, 1993), the United Kingdom (Sylva et al., 2004), Nepal (Bartlett, Arnold, & Sapkota, 2003), Guinea and Cape Verde (Jaramillo & Tietjen, 2001), as well as India, Brazil, and Colombia (Arnold, 2004) all confirm that ECD interventions compensate disadvantaged children for the lack of supports available in their environment. In Brazil, for example, grade completion rates increased from 2% to 40% as a result of a community-based ECD program (World Bank, 1999). In the following section, we highlight some ECD programs which have demonstrated positive impacts on children's readiness for school. These are programs which have been implemented by AKF and other NGOs in different parts of the Majority world.

In a district of Nepal with some of the worst education outcomes in the country, community-based ECD centers offered half-day sessions five days a week to children of disadvantaged families (Bartlett et al., 2003). Program

findings indicated that, of ECD children (children who had attended ECD centers), more than 95% continued on to primary school, compared to 75% of non-ECD children (those who had not attended ECD centers). Moreover, the Grade 1 repetition rate for ECD children was one seventh that of non-ECD children. The ECD children passed their school exams at markedly higher rates, and continued tracking has found 80% of the cohort has been moving through school with no failure or repetition. Over four years, their annual dropout rate has been only 1.2%, one tenth of the national figure. Projections predict that these children, compared to the average Nepali student, are more than twice as likely to complete primary school within five years. Children's success has been attributed to the impact of the program on children themselves, and also to the effect that this has on their parents and teachers when they go to primary school. The children are identified by their parents, teachers, and other children as being self-assured, capable, articulate, and highly motivated, as well as respectful, helpful, neat, and clean. Parents describe the increased interest they take in their children, and teachers appreciate these students as eager learners and sometimes enlist their help in assisting other children in the class.

Other studies have found similar results. In Peru, Aldaz-Carroll (1999) found that nearly 60% more poor children who participated in preschool completed primary school than poor children who did not access preschool. In India, Chaturvedi, Srivastava, Singh, and Prasad (1987) found that less than one third of children who had participated in an ECD program dropped out of school by fourth grade, compared to nearly half of children who had not attended any such program.

The Turkish Early Enrichment Project (Kagitscibasi, Unar, & Bekman, 2001) implemented mother training and preschool programs in low-income, low-education areas of Istanbul. Research demonstrated significantly improved school attainment and retention for children. Seven years after the program, 86% of the children whose mothers had participated in the program were still in school compared to 67% of those who had not. Children who had been exposed to either type of intervention (mother training or preschool programs), compared to those who had not, exhibited higher school attainment, were more likely to attend university, began their working lives at a later age, and had higher occupational status. These findings illustrate the significant impact not only of programs directed towards children but also of programs, like mother training, that empower parents to provide a supportive home learning environment to their children.

AKF has endeavoured in particular to draw best practices from research evidence and program experience,

and implement them in culturally and locally appropriate manners to support ECD in disadvantaged parts of the world. The Madrasa Early Childhood Program in East Africa (Kenya, Zanzibar, and Uganda) was established by AKF in the mid-1980s in response to marginalized Muslim communities' desire to give their children a solid start in life—supporting school success while reaffirming local cultural and religious values and knowledge. With the support of Madrasa Resource Centers (one in each country), the Madrasa Early Childhood Program supports communities to establish community-owned and community-driven preschools that offer young children a developmentally and culturally appropriate curriculum, effective teachers, and a rich learning environment. A recent tracking study compared children with Madrasa preschool experience, other preschool experience, and no preschool experience (Mwaura, Sylva, & Malmberg, in press). The findings indicated that children with preschool experience performed much higher on a range of cognitive assessments than children with no preschool experience, even after controlling for pre-test scores and demographic factors. These cognitive outcomes seem to be enhanced further by the quality of the preschool environment, which has been found to be higher in Madrasa preschools (Mwaura, undated-a). A more specific tracking study in Uganda (Mwaura, undated-b) had striking results, demonstrating that the Grade 1 repetition rates for children with preschool experience were half of those for children with no preschool experience.

In Pakistan, AKF's Releasing Confidence and Creativity (RCC) ECD program is an interesting example of how analysis of grade disaggregated school data can result in radical re-thinking of program design. This program was initially envisaged as a general school improvement program. However, close analysis of government school data revealed extremely high early drop-out and repetition rates, especially among girls. In addition, new opportunities were emerging due to changes in the policy environment: the katchi class (an in-school preparatory year) had just been given full recognition by the government as an integral part of basic education. This resulted in a complete reorientation of the RCC program design, from a general school improvement program to an initiative initially deliberately targeting the katchi class. The RCC program included the following: ECD awareness raising, training local women as katchi class teachers, establishing katchi classes, providing low-cost/no-cost learning materials, and encouraging parent and community involvement in the local school (e.g., as resources to teach local songs, share stories, and demonstrate specific skills; assisting construction; etc.). RCC program data indicate that enrollment in RCC classes has

increased dramatically and early grade dropouts are minimal (1.5% in Grade 1 versus a national Grade 1 dropout figure of 15.3% (UNESCO, 2007).

These and other studies from around the world demonstrate significant differences between children who have participated in ECD programs and those who have not. Children who have participated in ECD programs are able to work independently, have more confidence in themselves and higher aspirations for their futures. The persistence of the benefits of ECD, even when schooling is poor, is consistent with our understanding of the active role children play in their own learning.

Unfortunately, far too few children have access to quality ECD programs. The Multiple Indicator Cluster Studies by the United Nations Children's Fund (UNICEF) in 48 countries found marked inequities in terms of participation in ECD programs according to income levels, maternal education, and whether or not parents lived in a town (UNICEF, 2002). Given the still limited numbers of children in good ECD programs, it is imperative to look at ways to strengthen primary schools so that all children can benefit from a strong, supportive environment, especially in the early years.

Improving Schools' Readiness for Children and the Transition Process

A number of efforts have been undertaken to improve schools' abilities to support children to adjust successfully, learn effectively, and achieve well. These include general school improvement projects, specific initiatives focused on the early primary grades, and strategies to link and integrate ECD and early primary grades to improve the transition experience.

General School Improvement

Much work has been carried out internationally in the areas of school improvement and school effectiveness (Anderson, 2002; Farrell & Oliveira, 1993). School improvement and education reform efforts bring together professional development and in-class mentoring support for teachers, strengthened school management and leadership, enhanced community engagement, and improved system supports (Anderson, 2002).

While it is essential to give attention to the multiple levels which impact on quality, education reform efforts have sometimes made too many assumptions about the impact of these inputs on children and their learning (Arnold et al., 2006). School improvement efforts have also generally been quite weak in addressing systemat-

ically the learning needs and issues of early primary grades, even where dropout and repetition rates in the first two years are highly problematic. Links with ECD services, where these operate, are often non-existent. This may be due to not reviewing and disaggregating such data—at the school level—when putting together “school development plans.” It may also be related to an insufficient understanding (by planners, development agencies, governments) of what specific teaching and learning processes actually work best at this level—particularly in schools serving poor and marginalized students (Abadzi, 2006).

There has been some success, however, with “child-friendly” school programs in the Majority world. In such programs, schools are provided with extra materials for play and learning, teachers receive training in active learning methods and child rights, and schools are supported to enhance the active involvement of parents and communities. In Nepal, child-friendly schools had sustained improved enrollment numbers, reduced drop-out rates, and increased promotion rates (Bartlett, Pradhanang, Sapkota, & Thapa, 2004). These gains were particularly strong for girls and for children of excluded dalit caste groups. In fact, dalit children in the holistic child-friendly school program benefited significantly more than dalit children who were part of a specific dalit support program.

Investing in Early Primary Grades

The challenge is to ensure that school improvement programs focus firmly on enabling better learning opportunities for all children, with particular attention to the early grades. Abadzi (2006) advocates a shift in policy to invest more in the lower grades and emphasizes the benefits to the upper grades of such a shift. Indeed, a recent study in rural Pakistan examined rates of return in terms of labor earnings on investments and schooling. The researchers found that rates of return were much higher for investing at the primary school level than at the middle school level (Behrman, Ross, & Sabot, 2008).

Abadzi (2006) recommends strategies for Grade 1 and 2 teachers specifically. These include smaller classes, clear and consistent classroom strategies including intensive and interactive practice to improve language knowledge, mother tongue teaching of reading and basic concepts, books that can be taken home, and the use of additional people who can help children with reading and other skills (e.g., older students). Specific training for lower primary teachers (who should be the most experienced teachers) is strongly recommended to improve their skills in supporting young learners and teaching early reading and math.

Programs to support children's early primary experiences have been implemented in various regions around the world. In Cambodia, a UNICEF-supported School Readiness Program introduced a readiness course in the first two months of a child's formal education, in order to compensate for the lack of formal preschooling and generally poor ECD experiences in Cambodia (UNICEF, 2004). The program resulted in improved learning as measured by a standardized testing instrument. Follow-up to examine the program's impact on learning achievement in core curriculum (language and math) at the end of Grade 1 also found significant impact in 22 of 25 areas.

AKF has similarly learned from experience the importance of focusing on the early primary grades. In Afghanistan, AKF's initial education activities began with relief and rehabilitation efforts in response to the needs of the region: so few schools were in usable condition, if indeed they existed at all. Then, school improvement work was launched, focusing on professional development and in-class mentoring support for teachers, strengthened school management and leadership, enhanced community engagement, and improved system supports. Over time, however, daily classroom observations and statistical analysis of government data revealed that the numbers of girls in Grade 3 were only one quarter of those in Grade 1. Young girls were entering school in impressive numbers but many were leaving early, before they had had time to establish even basic literacy and numeracy skills. This realization led to a reorientation of the program, refocusing attention to improving learning opportunities in Grades 1–3. Low-cost/no-cost learning material kits are being provided to the early grades. A hands-on training package, based on school textbooks, uses a systematic scaffolding approach to support the practice of active learning methodologies. Particular effort is being given to ensuring that the activities are recognized by teachers as helping children learn skills and concepts in the textbooks. Preliminary program findings indicate that children in program schools are outperforming children in other similar schools on a curriculum-referenced learning achievement test.

Integrating the ECD and Early Primary Experience

ECD programs generally aim to provide holistic curriculum, active learning, and rich stimulating environments, while Grade 1 classrooms often reflect the more formal and routine nature of primary school. There have been a number of efforts to improve the transition experience for young children moving from ECD programs or

home to early primary, both in terms of specific transition activities and in terms of integrating ECD and early primary school in certain ways.

Transition activities have frequently been initiated by ECD programs, in response to concern regarding the often dramatic change experienced by children as they shift from the ECD center to Grade 1. In Nepal, for example, Save the Children supported a transition program for children during their last few months in ECD centers (Bartlett et al., 2003). This program introduced children to some of the activities and skills that would be emphasized once they entered primary school. It also arranged children's visits to the primary school and ensured that Grade 1 teachers visited children in the ECD centers. The program also worked with all teachers in the primary school to develop a commitment to children's rights, with particular emphasis on providing a welcoming and non-punitive atmosphere for all children (especially girls and children from marginalized groups) and on using active learning approaches. The transition program, along with the greater ECD program, resulted in significant improvements in school attendance, pass rates, and promotions, and corresponding reductions in dropout and repetition (Bartlett et al., 2004).

Similarly, in Guyana, a research project brought nursery school teachers, Grade 1 teachers, and parents together to discuss children's transition problems and the disconnects between ECD and the formal system which was resulting in high Grade 1 dropout rates (Rodrigues, 2000). The initiative led to both groups of teachers agreeing on goals for children, including basic skills and cognitive development, socialization for respect, and the extension of learning outside the classroom. Pairs of nursery and primary teachers began to work together, resulting in home visits, smaller group work, and the establishment of learning corners and activities in Grade 1 that were more suitable for younger children's learning styles.

Research and theory on transition emphasizes the importance of linkages and continuity (Bertrand & Beach, 2004; Carnegie Corporation of New York, 1996; Lombardi, 1992). As children move into the early primary years, their motor and language skills become more developed, they can pay attention for longer periods, they play more cooperatively, and their interests are wider. However, throughout the preschool and early primary years, children learn best through active exploration of concrete materials in their environment and through interactions with adults and other children (NAEYC, 1997). Developmentally appropriate practice (NAEYC, 1997) is pedagogical practice which responds to children's interests, promotes positive dispositions towards learning, and guides their development of complex language, problem-

solving, and social skills (Lombardi, 1992). There have been a number of efforts which have successfully pushed up developmentally appropriate practice from ECD into the formal primary school system.

In the AKF Madrasa Early Childhood Program in East Africa described earlier, MRC staff learned that Madrasa preschool children experienced a serious jolt with the change in learning environment when they entered Grade 1. The MRCs have begun to organize annual Open Days and workshops for Grade 1 teachers and head teachers from the primary schools into which the preschools feed. During these sessions, MRC staff use many of the Madrasa preschool learning materials, engaging their colleagues from the primary schools in discussions on principles of active learning—key for those who had viewed activities in the preschool as “only play.” As a result, MRCs are receiving increasing numbers of requests from early primary teachers and other stakeholders for training and support in developing appropriate teaching and learning materials for early primary classrooms. The evolution of the MRCs’ understanding of transition reflects the importance of an integrated approach. They remain concerned about how their preschool graduates manage as they move into Grade 1, and are also actively working with early primary teachers on ways to support all children (with or without preschool experience) in what are often very crowded early primary classrooms.

The AKF RCC program in Pakistan, also described earlier, has more directly extended the ECD approach into the early primary years. The RCC program initially targeted the katchi (pre-primary) classroom and teacher. The katchi classes quickly became beacons within the schools—hubs of color and enthusiastic activity. Within two years, demand from parents, teachers, and children alike resulted in RCC activities being extended to Grades 1 and 2. In fact, efforts have been made by RCC program staff to examine the government curriculum for Grades 1 and 2 in detail, and provide primary level teachers with specific methods to teach the material through learner-centered and active-learning methodologies.

Some countries are moving toward integrated initial training, so that teachers, at all levels of the education system, share a common theoretical base. Similarly, curriculum frameworks that bridge preschool and primary education strengthen pedagogical continuity, as does joint in-service training. A multi-country study (OECD, 2001), looking at a range of policies and programs related to early childhood provision, found that attention to children’s transition to school led to more policy focus on building bridges across levels including staff training, regulation, administration, and curricula.

Jamaica serves as an example of a new government initiative to link preschool and primary school education. The pilot Pre-Primary to Primary Transitions Program began in 2001 with support from UNICEF to the government’s Basic Education and Early Childhood Education (UNICEF, undated). The program links preschools and primary schools, and tracks children (aged 4 to 8 years) moving between them. The program’s objectives are to improve enrollment, attendance, quality of teaching and learning in preschools and early primary grades, coordination between the levels, and parental support. The pilot program focuses on literacy through an integrated curriculum. In-service workshops, which include modelling, are attended by both levels of teachers.

Similarly, the Step by Step Transition—Primary School Program, implemented in Central Eastern European and Commonwealth of Independent States countries, intentionally establishes a connection in teaching and learning between preschool and primary school (Klaus, 2006). In preschool, the children role play being in primary school, and children from Grade 1 are invited to the preschool to talk about their experiences. Parents and community members are actively involved in the transition process. Preschool teachers and parents review the primary school curriculum and discuss the child to make sure he or she has the skills necessary for Grade 1. The primary school and preschool teachers are trained in the same pedagogic framework and use the same seven core modules (e.g., learning environment, planning and assessment, social inclusion). Classes are non-graded for the first four years of primary education, enabling teachers to provide continuity in teaching and learning, and to focus on supporting children’s attainment of foundational knowledge and understanding of key concepts.

Other innovative approaches to integrating curriculum and teaching approaches have been pioneered by grassroots NGOs such as Bodh Shiksha Samiti (Bodh), an AKF partner in Rajasthan, India. Bodh has piloted original educational approaches for the most disadvantaged in both urban slums and rural areas, working through their own *bodhshalas* (Bodh’s urban non-formal schools) and government schools. Classrooms have plenty of low-cost/no-cost learning materials, there is continuous assessment of all students, and there is solid peer support among teachers. Traditional grades are replaced by three broad levels through which children progress from the age of 3 to approximately 16. The *bodhshalas* offer seamless integration for students from preschool into primary and then into middle school (Govinda, 2006). Program data indicate that Bodh-supported primary schools have been found to have one quarter the dropout rate of that found in non-intervention schools in Rajasthan. Moreover, the

impact of Bodh's approach is particularly strong for girls and other marginalized students (AKF, 2006; Gowani & Tiwari, 2006).

Moving Forward

This paper has looked at ways to improve the quality of learning opportunities available to children. Defining quality is not easy, but at its center is the relationship between learners and teachers, and the learning environment within which they interact. Whether we are talking about children's first and most influential teachers (their families), early childhood program staff, or primary school teachers, it is the quality of their interaction with the children in their care, and the continuity between them, which is at the heart of this paper's concern.

Transition issues must be given greater attention if children's overall development and learning are to receive better supports. A transition framework deliberately links ECD and early primary components, and works to both expand ECD initiatives and increase attention to Grades 1 and 2. The goal is to address the acute crisis of high dropout and repetition in the early primary years and the establishment of persistent patterns of failure so that all children can develop their full potential.

This paper recommends action on the following five fronts: (1) more and better ECD, which ensures that the most disadvantaged children are reached; (2) better links, coordination, cooperation, and understanding between ECD programs and the primary school system; (3) prioritization of attention to and resources for the early grades of primary school as a central component of education reform; (4) parental involvement at all stages; and (5) better information and data.

Early childhood interventions ensure that children are ready for school. But equally importantly, schools must be ready for all children—whether or not they have had the opportunity to participate in an early childhood program. Such an approach would dramatically improve the chances of meeting EFA and MDG goals and make an important contribution to addressing entrenched cycles of poverty and exclusion. AKF believes working with the neglected early primary grades while at the same time supporting children's overall development before they enter school is a powerful combination and holds the key to children's educational success.

References

Abadzi, H. (2006). *Efficient learning for the poor: Insights from the frontier of cognitive neuroscience*. Washington, D.C.: World Bank.

- Aga Khan Foundation. (2006). *Brief report on Bodh Shiksha Samiti*. New Delhi: Author.
- Aldaz-Carroll, E. (1999). *The intergenerational transmission of poverty: Significance for Latin America and the IDB*. Washington, D.C.: Inter-American Development Bank.
- Anderson, S. (Ed.). (2002). *Improving schools through teacher development: Case studies of the Aga Khan Foundation projects in East Africa*. Lisse, Netherlands: Swets & Zeitlinger.
- Arnold, C. (2004). Positioning ECCD in the 21st century. *Coordinators' notebook, No. 28*. Toronto: Consultative Group on Early Childhood Care & Development.
- Arnold, C., Bartlett, K., Gowani, S., & Merali, R. (2006). *Is everybody ready? Readiness, transition and continuity. Reflections and moving forward*. Paper commissioned for the EFA Global Monitoring Report 2007, Strong Foundations: Early Childhood Care and Education. Retrieved September 16, 2008, from <http://unesdoc.unesco.org/images/0014/001474/147441e.pdf>.
- Arnold, C., Bartlett, K., Gowani, S., & Merali, R. (2007). *Is everybody ready? Readiness, transition and continuity: Reflections and moving forward. Working Paper 41*. The Hague, Netherlands: Bernard van Leer Foundation.
- Barnett, S. (1995). Long-term effects of early childhood programs on cognitive and school outcomes. *Future of Children, 5*(3), 25–50.
- Barnett, S. (1998). *Long-term cognitive and academic effects of early childhood education on children in poverty*. Ypsilanti, MI: High/Scope.
- Bartlett, S., Arnold, C., & Sapkota, P. (2003). *What's the difference?: An ECD impact study*. Kathmandu, Nepal: Save the Children.
- Bartlett, S., Pradhanang, U., Sapkota, P., & Thapa, N. (2004). *Everyone counts: Dalit children and the right to education in Nepal*. Kathmandu, Nepal: Save the Children.
- Behrman, J., Ross, D., & Sabot, R. (2008). Improving quality versus increasing the quantity of schooling: Estimates of rates of return from rural Pakistan. *Journal of Development Economics, 85*, 94–104.
- Benard, B. (2004). *Resiliency: What we have learned*. San Francisco: WestEd.
- Benson, C. (2005). *Girls, educational equity and mother tongue-based teaching*. Bangkok: UNESCO.
- Bertrand, J., & Beach, J. (2004). *A guide to international early childhood education. Critical success factors report*. Conducted for the Egypt Program, American and Middle East Branch, Canadian International Development Agency.
- Bradley, R., & Corwyn, R. (2002). Socioeconomic status and child development. *Annual Review of Psychology, 53*, 371–399.
- Brooks-Gunn, J., & Duncan, G. (1997). The effects of poverty on children. *Future of Children, 7*(2), 55–71.
- Bruns, B., Mingat, A., & Rakotomalala, R. (2003). *A chance for every child. Achieving universal primary education by 2015*. Washington, D.C.: World Bank.
- Cambodia Ministry of Education, Youth & Sports. (1999). *Repetition study*. Retrieved December 5, 2005, from http://www.moeys.gov.kh/details-directions01-02/RepetitionStudy/RepetitionStudy_content.htm.
- Cameron, L. (2005). Primary completion rates. *Technical Paper WP-09-01*. Washington, D.C.: Education Policy and Data Center, Academy for Educational Development.
- Carnegie Corporation of New York. (1996). *Years of promise: A comprehensive learning strategy for America's children*. Re-

- port of the Carnegie Task Force on Learning in the Primary Grades. New York: Author.
- Chaturvedi, E., Srivastava, B., Singh, J., & Prasad, M. (1987). Impact of six years' exposure to the ICDS scheme on psychosocial development. *Indian Paediatrics*, 24(2), 153–64.
- Chilora, H. (2000). *Language policy research and practice in Malawi*. Paper presented at the Comparative and International Education Society Conference, San Antonio, United States.
- Chilora, H., & Harris, A. (2001). Investigating the role of teacher's home language in mother tongue policy implementation: Evidence from IEQ research findings in Malawi. *USAID Document No. PN-ACL-068*. Washington, D.C.: USAID. Retrieved September 19, 2008, from http://www.ieq.org/pdf/Investigating_Role_Language.pdf.
- Cleveland, G., & Krashinsky, M. (1998). *The benefits and costs of good child care: The economic rationale for public investment in young children*. Toronto: Childcare Resource & Research Unit, University of Toronto.
- Consultative Group on Early Childhood Care & Development. (1991). *Preparing children for schools and schools for children*. New York: UNICEF.
- Department for International Development. (1999). *Towards responsive schools: Supporting better schooling for disadvantaged children. Case studies from save the children*. London: Author.
- Engle, P., Black, M., Behrman, J., Cabral de Mello, M., Gertler, P., Kapiriri, L., Martorell, R., Young, M., & the International Child Development Steering Group. (2007). Strategies to avoid the loss of developmental potential in more than 200 million children in the developing world. *Lancet*, 369, 229–242.
- Fabian, H., & Dunlop, A.-W. (2007). Outcomes of good practice in transition processes for children entering primary school. *Working Paper 42*. The Hague, Netherlands: Bernard van Leer Foundation.
- Farrell, J., & Oliveira, J. (1993). *Teachers in developing countries: Improving effectiveness and managing costs*. Washington, D.C.: World Bank.
- Govinda, A. (2006). *Early childhood education under PESLE—An analytical review*. Unpublished report to the Aga Khan Foundation, India.
- Gowani, S., & Tiwari, S. (2006). *Girls education under PESLE*. Unpublished report to the Aga Khan Foundation, India.
- Grantham-McGregor, S., Cheung, Y., Cueto, S., Glewwe, P., Richter, L., Strupp, B., & the International Child Development Steering Group. (2007). Developmental potential in the first 5 years for children in developing countries. *Lancet*, 369, 60–70.
- Hart, B., & Risely, T. (2003). *Meaningful differences in the everyday experiences of young American children*. Baltimore, MD: Paul H. Brookes.
- Hertzman, C. (1999). The biological embedding of early experience and its effects on health in adulthood. *Annals of the New York Academy of Sciences*, 896, 85–95.
- Janus, M. (2007). The Early Development Instrument: A tool for monitoring children's development and readiness for school. In M. E. Young (Ed.), *Early child development from measurement to action: A priority for growth and equity*, pp. 141–155. Washington, D.C.: World Bank. Retrieved April 7, 2008, from <http://siteresources.worldbank.org/INTECD/Resources/Part3-Chapter4-Janus.pdf>.
- Janus, M., & Offord, D. (2000). Readiness to learn at school. *ISUMA*, 1(2), 71–75. Retrieved April 7, 2008, from <http://www.offordcenter.com/readiness/pubs/publications.html>.
- Jaramillo, A., & Tietjen, K. (2001). Early childhood development in Africa: Can we do more for less? A look at the impact and implications of preschools in Cape Verde and Guinea. *Africa Region Human Development Working Paper Series*. Washington, D.C.: World Bank.
- Kagitcibasi, C., Unar, D., & Bekman, S. (2001). Long-term effects of early intervention: Turkish low-income mothers and children. *Applied Developmental Psychology*, 22, 333–361.
- Klaus, S. (2006). *The step by step program*. Email correspondence on February 15, 2006.
- Lombardi, J. (1992). *Beyond transition: Ensuring continuity in early childhood services*. Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. Retrieved September 16, 2008, from <http://www.ericdigests.org/1992-3/beyond.htm>.
- Mehta, A. (2005). *Elementary education in India, progress towards UEE?: Analytical report*. New Delhi: National Institute of Educational Planning and Administration. Retrieved September 16, 2008, from <http://www.dpepmis.org/webpages/reports&studies.htm>.
- Mustard, J. (2002). Early child development and the brain—the base for health, learning, and behavior throughout life. In M. E. Young (Ed.), *From early child development to human development: Investing in our children's future*, pp. 23–61. Washington, D.C.: World Bank.
- Mustard, J. (2006). Experience-based brain development: Scientific underpinnings of the importance of early child development in a global world. *Paediatrics and Child Health*, 11(9), 571–572.
- Mwaura, P. (undated-a). *Quality of preschool learning environment: The effects of Madrasa Resource Center in East Africa*. Unpublished report to the Madrasa Resource Center.
- Mwaura, P. (undated-b). *Repetition rate in Uganda*. Unpublished report to the Madrasa Resource Center.
- Mwaura, P., Sylva, K., & Malmberg, L.-E. (in press). Evaluating the Madrasa preschool program in East Africa: A quasi-experimental study. *International Journal of Early Years Education*.
- Myers, R. (1995). *The twelve who survive: Strengthening programs of early childhood development in the Third World*. Ypsilanti, MI: High/Scope.
- Myers, R., & Landers, C. (1989). *Preparing children for schools and schools for children*. Discussion paper prepared for the fifth meeting of the Consultative Group on Early Childhood Care & Development. Paris: UNESCO.
- National Association for the Education of Young Children. (1997). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8. A position statement of the National Association for the Education of Young Children*. Washington, D.C.: Author. Retrieved September 16, 2008, from <http://www.naeyc.org/about/positions.asp>.
- Nielsen, D. (2005). Primary education and poverty reduction: Will reaching the Millennium Development Goals be enough? In *Proceedings of the IEG Conference on the Effectiveness of Assistance for Human and Social Development*. Washington, D.C.: World Bank.
- Odaga, A., & Henevald, W. (1995). Girls and schools in Sub-Saharan Africa: From analysis to action. *World Bank Technical Paper 298*, Washington, D.C.: World Bank.

- Organisation for Economic Cooperation and Development. (2001). *Starting strong: Early childhood education and care*. Paris: Author.
- O'Sullivan, M. (2006). Teaching large class sizes: The international evidence and a discussion of some good practice in Ugandan primary schools. *International Journal of Educational Development*, 26, 24–37.
- Pikulski, J., & Templeton, S. (2004). *Teaching and developing vocabulary: Key to long-term reading success*. Boston: Houghton Mifflin.
- Pratham (2007). *ASER 2006—Annual status of education report*. New Delhi: Author.
- Psacharopoulos, G., Rojas, C., & Velez, E. (1993). Achievement evaluation of Colombia's Escuela Nueva. *Comparative Education Review*, 37(3), 263–276.
- Rimm-Kaufman, S., Fan, X., Chiu, Y., & You, W. (2007). The contribution of the Responsive Classroom Approach on children's academic achievement: Results from a three year longitudinal study. *Journal of School Psychology*, 45, 401–421.
- Rodrigues, A. (2000). *Final report on the evaluation of the project "Effecting a smooth transition from nursery to primary."* Report to UNICEF Guyana.
- Rugh, A. (2000). *Starting now: Strategies for helping girls complete primary*. Strategies for Advancing Girls' Education (SAGE) Project. Washington, D.C.: Academy for Educational Development.
- Schweinhart, L., Barnes, H., & Weikart, D. (1993). *Significant benefits: The High/Scope Perry Preschool Study through Age 27*. Ypsilanti, MI: High/Scope.
- Shonkoff, J., & Phillips, D. (2000). *From neurons to neighbourhoods: The science of early childhood development*. Washington, D.C.: National Academies.
- Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (2004). *The Effective Provision of Preschool Education (EPPE) Project: Findings from the preschool period. Summary of findings*. London: Institute of Education, University of London. Retrieved September 16, 2008, from http://k1.ioe.ac.uk/cdl/epped/pdfs/epped_brief2503.pdf.
- Uganda Bureau of Statistics & ORC Macro. (2002). *DHS EdData Survey 2001: Education data for decision-making*. Calverton, MD: ORC Macro.
- Uganda Ministry of Education and Sports. (2007). Progress in achieving EFA goals, MDGs and cross-cutting issues. In *Education and Sports Sector Annual Performance Report*. Retrieved September 16, 2008, from http://www.education.go.ug/Review_TOR1.htm
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2004). *EFA Global Monitoring Report 2005: The Quality Imperative*. Paris: Author.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2005). *EFA Global Monitoring Report 2006: Literacy for Life*. Paris: Author.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2007). *EFA Global Monitoring Report 2008: Education for All by 2015—Will We Make it?* Paris: Author.
- United Nations Children's Fund (UNICEF). (2002). *Early childhood education: The MICS2 experience*. Draft Paper. New York: Author.
- United Nations Children's Fund (UNICEF). (2004). *School readiness program: Assessment report. Phnom Penh, Cambodia*. New York: Author.
- United Nations Children's Fund (UNICEF). (undated). *Transitions project: Helping Jamaican children make the move from pre-primary to primary school*. New York: Author.
- van der Gaag, J. (2002). From child development to human development. In M. E. Young (Ed.), *From early child development to human development: Investing in our children's future*, pp. 63–78. Washington, D.C.: World Bank.
- Weitzman, M. (2003). Low income and its impact on psychosocial child development. In R. E. Tremblay, R. G. Barr & R. de V. Peters (Eds.), *Encyclopedia on early childhood development* [online]. Montreal: Center of Excellence for Early Childhood Development. Retrieved September 16, 2008, from <http://www.child-encyclopedia.com/documents/WeitzmanANGxp.pdf>.
- World Bank. (1999). *Boosting poor children's chances: Early childhood development services for poor children in Brazil*. Draft policy report. Washington, D.C.: Author.
- World Health Organization. (2004). *The importance of caregiver-child interactions for the survival and healthy development of young children: A review*. Geneva: Author.
- Young, M. (Ed.) (2002). *From early child development to human development*. Washington, D.C.: World Bank.