Post 2015: Learning as the Measure of Education in Africa

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The following is a position paper of the Education Sector at the Earth Institute intended to present recommendations regarding priorities for the post 2015 education agenda in Africa. The authors explore the relevant literature on specific topics, including experiences in the Millennium Villages and best practices of partner agencies such as UWEZO, to highlight areas key to education. This is an opinion article that is mostly based on literature review and field-based realities.

I. INTRODUCTION: RIGHTS-BASED APPROACH

Through this paper, the Millennium Villages Project (MVP) and partners aim to share best practices and lessons learned toward the goal of improved educational access, participation, retention, and quality in Africa’s post 2015 agenda. The co-authors of this paper have worked together to develop a rights-based, learning-centered education goal and recommended actions toward achieving this goal. These actions aim to materialize the standards of human development set out more broadly in the post 2015 agenda by creating community and national-level ownership in the improved measurement, participation in,

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and realization of learning outcomes. The post 2015 development goals are promised actions toward universal achievement of human rights for all people. It is our responsibility to ensure that the post 2015 development framework makes specific reference to and reinforces these rights-based standards, particularly the right to education.

Education is recognized as an instrumental foundation for realizing all other rights in which governments play a crucial role. In the 11 African countries where MVP operates,2 government partners have helped the Project understand the challenges and complexities of providing education at a national scale. With the post 2015 development agenda, we have an opportunity to revisit and expand upon education goals to better reflect the full impact of the right to education, including the right to learn and to thrive. In addition to the main education issue of equitable access to school, we are now in a position to work with ministries of education to take stock of current status and strategies and improve upon learning outcomes that catalyze a higher standard of living and enable full participation in society by informed global citizens.

II. CURRENT STATUS IN EDUCATION

The Millennium Development Goals (MDGs) taken as a whole have provided a solid foundation for a common global development agenda and made significant progress in advancing human development in the past decade (van Fleet, Watkins, & Greubel, 2011)). In building this solid base, the goal of universal primary education has been, for the most part, interpreted as education inputs related to systems and infrastructure. Specifically, MDG 2 on achieving universal primary education has focused the global community of actors in education (NGOs, CSOs, and funders) toward education access, overlooking the needed emphasis on learning outcomes, including the most basic competencies in literacy and numeracy. In failing to address these aspects of their development, we deny children the basic skills intended to contribute to their survival, healthy development, and full participation in society. Several of the issues hindering the current status of education in the African countries where MVP works are outlined below.

Out-of-school: the unfinished agenda

Despite the current policy-level global dialogue around the learning crisis, it is widely acknowledged that the original MDG on universal access to primary education is still not a reality for many African children. According to the latest global data available, 59 million children of primary-school-age were out of school in 2010, half of them in Sub-Saharan Africa (UIS, 2013). The region has the highest out-of-school rate in the world, with nearly one of every four primary-school-age children out of school. While there have been significant increases in school enrolment over the past decade, out-of-school figures in the region increased from 29 to 31 million between 2008 and 2010 due to population growth (UIS, 2013).

2 The MVP sites are in Koraro (Ethiopia), Bonsaaso (Ghana), Dertu and Sauri (Kenya), Gumulira (2006–2011) and Mwandama (Malawi), Toya (2016–2011) and Tipy (Mali), Ikaram (2006–2011) and Pampaida (Nigeria), Mayange (Rwanda), Potou (Senegal), Mbola (Tanzania), Ruhiira (Uganda), and SADA (Northern Ghana).
There are three categories of out-of-school children. The first category is comprised of children who are never expected to enter school; this category represents the most difficult challenge to program and policy makers. These children make up 55% of the out-of-school population in Sub-Saharan Africa due to various combinations of complex issues. They are the most disadvantaged and hardest to reach due to extreme poverty, cultural barriers, conflict, other humanitarian emergencies in their communities, and—still—because of gender (Save the Children International, 2013). Twelve million girls (as compared to 7 million boys) in Sub-Saharan Africa are never expected to attend school (UNESCO, 2009). Very few girls continue to secondary school and even fewer continue to tertiary school. For many families, the choice to keep a daughter at home for immediate benefits from her chores and income outweighs the potential long-term benefits of schooling. The second category of out-of-school children includes children who had enrolled but dropped out of school before completion, while the third classification consists of school-age children who are likely to enter school in the near future. Figures 1-3 illustrate the current situation of out-of-school children in sub-Saharan Africa and around the world.

Figure 1. Classification of out-of-school children of primary age in sub-Saharan Africa

![Classification of out-of-school children of primary age in sub-Saharan Africa](image)

Source: UIS, 2013
Figure 2. Number of out-of-school children by region, 2000-2011


In 2012, the UIS estimated that 61 million children of primary school age were out of school in 2010. In 2013, the Institute revised its estimate for 2010 to 59 million children who are out of school. The difference between the estimates published in 2012 and 2013 is due to the availability of new national data.

Source: UIS & UNESCO, 2013

Figure 3. Number of out-of-school children by country, 2011

Source: UIS & UNESCO, 2013
Within the past five years a hidden crises in education has been uncovered. This hidden crisis has to do with what goes on inside schools. International discourse has now moved from enrollment to learning. This debate centers on the idea that there has been a lot of progress in improving enrollment rates but very little emphasis on the learning levels of children who attend schools regularly (van Fleet, Watkins, & Greubel, 2011). This learning crisis is not a one-country phenomenon, as recent evidence on learning levels show that this trend is visible in more than just a handful of countries (Beatty & Pritchett, 2012). Recently, the UN Secretary General announced the UN Global Education First Initiative. The objective of this initiative goes far beyond a basic enrollment push in education. The main priorities include putting everyone in school, improving the quality of learning in schools, and fostering global citizenship. Clearly, this is a step in the right direction.

**In school but not learning**

As we approach 2015, education in sub-Saharan Africa is characterized by a rise in enrollment across nearly all countries, paired with a pan-African crisis in learning. Both the second group of out-of-school children (children who had enrolled but dropped out of school before completion), as well as the third (dropouts and children who are likely to enter school in the near future) are directly affected by the usefulness of what is being taught in classrooms and how it is being taught. African children now have more opportunity to attend school; however, there continue to be large gaps in learning outcomes, including essential life skills such as reading, writing, and mathematics.

This stagnation in learning is reflected across MVP sites and among partner organizations, and is confirmed at a national level where learning outcomes are being measured. UWEZO, an NGO focused on learning assessments, has conducted surveys in Kenya, Tanzania, and Uganda, showing that two out of every ten children in Standard (Grade) 6 do not have Standard 2 level literacy and numeracy competencies (UWEZO, 2012). Data from Early Grade Reading Assessments (EGRA) in sub-Saharan Africa also show serious learning gap levels in the lower grades, as shown in Figure 4.

**Figure 4.** Percentage of students who cannot read a single word of a one-paragraph story after two years in school

![Graph](image_url)
Globally, access to schooling has been expanded at the cost of compromising the quality of education. In the case of India, while enrollment in Grade 8 increased from 82 percent to 87 percent between 2006 and 2011, ASER tests suggest that the proportion of children in Grade 8 who could do basic division in math fell from 70 to 57 percent during the same period (Pritchett, Banerji, & Kenny, 2013).

Figure 5. Reading and numeracy skills of primary school students in Sauri, MVP, Kenya

Early results of learning assessments have been gradually introduced in MVP villages since 2012. Household-level evaluations were conducted in 2012 in the Millennium Villages sites of Sauri (Kenya), Mbola (Tanzania) and Ruhiira (Uganda); school-level assessments were implemented in 2013 in Mbola (Tanzania), Ruhiira (Uganda) and Bonsaaso (Ghana). To date, these assessments have confirmed that in MVP schools, as in the rest of Africa, children are not adequately learning the skills they need to improve their standard of living (reading, writing, and math). These skills affect their ability to exercise other fundamental rights, such as economic empowerment and political participation. For instance, the MVP site of Sauri in Kenya is performing relatively well in terms of school access, with almost 80% of primary-age children attending school. However, less than two-thirds of those attending school actually complete the full six years of primary education and inadequate levels of instruction, especially in lower grades, may be driving some children out of school.

Unequal access, unequal learning

Reports from EFA Global Monitoring show that of the 57 million out-of-school children identified around the world in 2011, 28.5 million lived in countries affected by conflict. Looking into that figure, sub-Saharan African countries accounted for 44.2% (12.6 million), followed by South and West Asia with a combined 27%. MVP works in some conflict-affected sites (e.g., two sites in Mali) and it is clear that achieving the Millennium Development Goal of universal access to primary education in conflict-affected countries will extend well beyond 2015.
The Democratic Republic of Congo, politically unstable for the last 17 years, launched its “Education for all” campaign in 2010. In this context, a UNESCO-sponsored study on out-of-school children revealed that 7.5 million school-age Congolese children are not in school or have never been enrolled in school (UNICEF, 2013). It is also a documented fact that rural areas account for 23% of out-of-school children compared to only 12% in urban areas. The following figure shows that the poorest females living in rural areas unsurprisingly have the highest odds of being out-of-school.

Figure 6. Average rate of out-of-school children by individual and household characteristics (in 57 countries)

![Figure 6](image)

*Note: Mean values are unweighted. Source: UIS calculations based on household survey data from 57 countries, 2006-2011.*

Not only do children from conflict-affected, rural, and poor areas have the least access to school, they also show the lowest academic performance. Assessments by UWEZO in East Africa show that children from rural and poor areas overwhelmingly underperform on simple tests in Math, English, and Kiswahili compared to their counterparts in urban and relatively affluent areas. The 2012 regional assessment reveals that non-poor children outperform poor children by 2-to-1 and by 3-to-1 relative to the ultra-poor in Kenya, Tanzania (mainland), and Uganda (UWEZO, 2012).

**Ready for school?**

The agenda for early childhood development and education (ECDE) in sub-Saharan African countries is often lost or neglected because of the lack of urgency, sustainable funding, and sensitization to the critical importance of early learning and appropriate care. The lack of provision for young children is especially troubling in African countries that invest less than 0.1% of their education budget to early childhood and health interventions for children. While global development experts have justifiably
emphasized the urgency of child survival efforts, the continuity of healthy child development has been largely abandoned.

Early cognitive and social-emotional development of children directly impacts their school outcomes and progress (Gorman & Pollitt, 1996; Liddell & Rae, 2001). For this reason, many early childhood programs and studies focus on the extension of schooling for compulsory early childhood and pre-school education (UNESCO, 2010). This is because services offered prior to the years of compulsory schooling are insufficient or delivered inadequately for children. According to OREALC-UNESCO (2007), early childhood education mostly focuses on “the year or two prior to primary education,” leaving out the education and care of children under five.

The implementation of multiple interventions is significant when considering early childhood (Marshall & Watt, 1999). Early childhood is a critical area for caregivers, educators, and health workers to synchronize efforts and thereby promote holistic care and development. Unfortunately, early childhood care and education (ECCE) is reported to be “too often fragmented and uncoordinated with the school system” (Woodhead & Moss, 2007, p. 7). ECCE is not yet a public sector in many African countries (UNESCO, 2010).

MVP has invested in pre-schools in the form of learning centers (infrastructure and learning materials), training for teachers, and pre-school feeding programs. Though the Project has initiated investments for pre-primary stages, ongoing pre-school interventions have not comprehensively included the 0-5 age category. Current investments need to be complemented with community and household-level education for mothers and sensitization for community members, as well as practical knowledge and training on early childhood care, to address the need of young children even before they begin enrolling in pre-schools and primary schools.

III. LINKING MEASUREMENT TO RESULTS: WHAT HAS PREVIOUSLY HELPED IMPROVE LEARNING?

The paragraphs above speak to the MVP experience and the experience of our government and non-government partners in 10 countries across sub-Saharan Africa. Though not a prescriptive or exhaustive list of considerations, this section combines research and experience to identify some key areas that have helped improve learning, from which we recommend actions toward a learning-centered goal of inclusive quality education.

Community participation and awareness regarding learning

In MVP sites, curriculum, pedagogy, and teacher training reforms have directly impacted the quality of learning and instruction in classrooms, with teacher responses and classroom observations illustrating clear differences between those who receive training versus those who do not. However, these inputs are most effective when the education system runs with proper oversight and accountability, and with a larger base of stakeholders invested in education at the community level. Both developed and developing countries have taken on various accountability reform strategies to improve educational performance with the crucial involvement of communities, families, and parents. Cross-country analysis
of OECD countries that have adopted these strategies shows that countries with greater accountability and local decision-making involving communities and parents have better learning outcomes (Fuchs & Woessmann, 2007; Woessmann, 2003 as cited in Bruns, Filmer, & Patrinos, 2001).

One way to engage a community around learning is to make information on students’ learning levels accessible and open to parents and community members (Pandey, Goyal, & Sundaraman, 2011). Apart from formal assessments in schools, learning assessments can be administered across the community at the household level for parents and community members to observe the testing process. This increases awareness of the literacy and numeracy competency of children in the community. The process of providing feedback to parents on their children’s cognitive development can engage these parents in the educational sphere in a meaningful and tangible way.

UWEZO, an MVP partner in Kenya, Tanzania, and Uganda, was inspired by the model of Pratham (India) and has been instrumental in facilitating assessments at the community level. These NGOs provide learning assessment tools and guide the implementation and administration of assessments, while informing and engaging the community around the learning that is taking place in their schools. To illustrate learning achievements, UWEZO and Pratham have developed report cards\(^3\) for clusters of schools and for individual schools to better inform policy makers, parents, and others involved in educational development on learning outcomes.

**Community participation and campaigns**

In the MVP experience, community mobilization and participation have been instrumental in spreading education messages and reaching educational goals. Various strategies have been used to engage school communities, and a majority of MVP sites have reported a positive trend in enrollment following campaigns involving active community participation. In the case of Pampaida (Nigeria), community sports events were paired with “mock school registers” to encourage enrollment. In numerous sites, including Ruhiiira (Uganda) and Potou (Senegal), educational radio programs as well as messages on the importance of schooling were broadcasted. Community outreach efforts led to increased enrollment in two Village Learning Centers in Mwandama (Malawi). In Senegal, women’s associations play an active role in disseminating education messages, including awareness on the importance of girls’ education in Potou.

Other strategies include strengthening community involvement in delivering quality basic education services. This has been done through instituting the MVP Community Education Workers (CEW) program. CEWs are low-cost dedicated education extension workers whose responsibilities involve identifying children at “educational risk” and working with households, parent-teacher associations, school management and administration, and the wider community to facilitate age-appropriate enrollment and regular attendance. The CEW model is anchored on a decentralization process that has facilitated trust-building between education professionals and the community. CEWs were conceived as

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\(^3\) An example of the report card can be found at [http://img.asercentre.org/docs/Publications/ASER%20Reports/ASER_2012/schoolreportcard.pdf](http://img.asercentre.org/docs/Publications/ASER%20Reports/ASER_2012/schoolreportcard.pdf)
a means to operationalize government educational policies and services that support, rather than
duplicate, school-based services. CEWs thus act as liaisons between the community and the education
system, creating a bridge between providers of education, social and community services, and
underserved and hard-to-reach groups. The CEW approach was designed as a form of community-level
monitoring and accountability mechanism that provides real-time information on attendance of school-
age children, identifies barriers to school participation and learning, and introduces locally appropriate
interventions to address identified gaps.

**Ensuring quality through teacher training**

Through the experience gained in each of the MVP sites, it is difficult not to acknowledge the essential
role of teachers and their impact on children’s learning. Ensuring a qualified teaching force translates to
providing solid and relevant teacher training that equips teachers to address learning needs through
skillful instruction. There is need for both subject knowledge and pedagogical knowledge to be
strengthened simultaneously, but teacher training, particularly in Africa, often falls short of offering
robust content and practice in these two areas (UNESCO, 2012).

The severe shortage of teachers in sub-Saharan Africa has made it difficult for existing teachers to
receive proper training and manage the large population of learners. UNESCO estimates that between
1.6 and 4 million additional trained teachers are required in order for Sub-Saharan Africa to achieve
universal primary education (UNESCO, 2012). The MVP experience has illustrated the essential role that
schools and local NGOs play in providing not only pre-service training opportunities but also in-service
training for teachers. Traditional campus-based training is simply not enough and courses are often
theory-based and lack practice-based quality instruction on effective teaching styles. Although schools
and teachers have reported some improvements, there continue to be many challenges in terms of
implementation. Lack of a consistent monitoring framework, insufficient visibility of results, a weak
financing mechanism, insufficient staffing levels, and an unclear delineation of roles prevent further
progress (UNESCO, 2009).

UNESCO’s EFA Global Monitoring Report on quality of education discusses various measurable factors to
increase the effectiveness of what happens during classroom instruction, giving thought to what
elements and content should be at the core of ideal teacher training. Teachers should have expertise
with aligning curriculum to assessment and keeping subject matter aligned to intended curriculum.
Additionally, using time optimally to maximize learning time and allocate ample time for active learning
and instruction, properly structuring instruction with learner engagement, ensuring frequent monitoring
and feedback on learning progress with reinforcement related to assessment outcomes, and
establishing an orderly classroom environment with a task-oriented climate and appropriate discipline
factors and mutual respect are all crucial factors for effective learning to take place (Scheerens, 2004 as
Teacher accountability for in-school violence

Teacher expertise in those two elements last mentioned, mutual respect and appropriate discipline, deserve more attention in the post 2015 agenda. We have learned that teachers discriminate against slow learners but taken for granted that otherwise teachers will behave according to their status. In Benin, Senegal, and Central African Republic over 50% of children were subject to school-based violence (Antonowicz, 2010). Corporal punishment is closely correlated with children’s dislike for school, which, in turn, is the most common reason for dropping out of school (Castle & Diallo, 2008). According to a Senegalese representative, violence was the main reason for dropping out of school in 2007 (Antonowicz, 2010). Bullying and sexual violence are other forms of school-based violence that drive children out of school. In Niger, “88 per cent of teachers confirmed the existence of sexual acts between students and teachers at their school” (Jones & Espey, 2008, as cited in Antonowicz, 2010).

Teacher motivation

Teacher training must be complemented by teacher motivation in order to increase teacher effectiveness, which is critical to students’ learning. Better working conditions increase teacher motivation, particularly when teachers work in poorer areas. Glewwe et al. show that providing textbooks increases teachers’ presence in the classroom and causes teachers to use the books more frequently in class (Glewwe et al. as cited in Brewer & McEwan, 2010, p. 245). Other factors affecting working conditions include better and regular salaries and improved school management practices. Better salaries are likely to reduce the opportunity cost of joining the teaching profession, increase teachers’ morale, and reduce absenteeism. In addition to the issue of teacher shortages, MVP sites also struggle with teacher absences. One way to successfully mitigate absences and motivate teachers to be in school has been to provide amenities and housing for teachers, especially in rural and remote areas, as well as promoting better supervision of schools and teachers with the help of the government. This is an area of continued challenge, however, and will require more attention and new strategies in the coming years.

Pedagogies and classroom management

As has also been shown in MVP sites, mother-tongue instruction in early schooling helps to improve student learning (Abadzi, 2011). There exist, however, various pros and cons of mother-tongue instruction. Challenges for implementing this policy in the case of Kenya include factors such as teachers not trained to instruct in mother-tongue, no teaching materials to instruct in mother-tongue, some teachers resisting this policy because they view it as one that will perpetuate tribal disunity and others resisting because they consider it retrogressive and difficult to implement when teachers from other ethnic communities are required to teach in an unfamiliar language of instruction. Interestingly, research also shows that the use of a transactional model over transmission had stronger effect than the medium of instruction (Bunyi, 1997; Robinah, 2003). For early grade learners, regular practice with letters presented one by one, gradual introduction of simpler letter combinations, phonological
awareness, writing new combinations of letters, extensive reading practice, and systematic corrective but encouraging feedback to students has been proven to improve student learning (Abadzi, 2011). This learning routine should be combined with easy-to-read and engaging and relevant textbooks to have a sustained impact on learning.

Classroom management techniques such as making children sit in groups of circles based on their reading levels is much more effective than all children sitting together (Banerji & Wadhwa, 2012). Other classroom management techniques such as para-teachers or contract teachers helping regular government teachers have been effective in improving student learning (Banerji & Wadhwa, 2012). Targeted coursework to improve student learning through summer/holiday camps has proved to be more effective than the same teachers teaching children over the course of a school term (Banerji, 2011); this may be explained by the length of summer/holiday camps (a few weeks) and the targeted goal of improving student learning.

**Non-formal school integration**

In order to align post 2015 education efforts within the UN’s sustainable development agenda, it is crucial not to overlook unique challenges and particularities in specific contexts and countries. In the MVP experience, West African sites have faced challenges attracting children to formal schools as opposed to prevalent religious schools (Koranic schools), which are not recognized by the government. The autonomous nature of religious schools makes it difficult to capture enrollment rates in educational programs. It is also difficult to monitor quality of instruction and school environments.

MVP sites in Tiby (Mali) and Potou (Senegal) have taken active steps to support respective governments’ national initiatives to integrate religious schools into the formal education system to provide better quality and oversight of schools. Through a multi-stakeholder meeting at the village level, MVP and its partners were able to explain the proposed integration of Koranic schools with the national education system. The outcome of the meeting was a ground-up solution to integration. The “integration,” however, does not follow a single model that fits all contexts in which Koranic schools exist. Two of the MVP sites, Tiby and Potou, have displayed variation in strategies and approach in addressing the issue of religious schools. In Tiby, the MVP team has been negotiating teaching of formal curriculum, including basic literacy and numeracy, in six schools in just one year. Similar negotiations are happening with an additional 190 religious schools. This collaboration represents a big step toward spearheading Koranic School Integration approaches and informing Mali government policy.

In Potou, multiple potential solutions have been brought to light through the stakeholder meetings, including community-based schools, Franco-Arab schools, and negotiations with 60 Koranic school owners. Further studies within the MVP site revealed that while Koranic school owners and teachers did not seem to value French language learning, parents better understood the value of other subjects, particularly French, and parents strongly desired that the two systems be reconciled in order to confer a diploma to their children. These findings, currently under analysis and review, will serve as a foundation for considerations to be made in implementing Koranic school integration models.
Accountability: linking school financing with learning

From the MVP experience, community-based accountability measures are essential to school performance. Asking municipal bodies (like schools) to share details of their funding holds them accountable to ensure that they function in accordance with the funding they receive. Therefore, if children are not learning in school, it becomes impossible in a system of accountability to attribute this failure to the school not receiving funds on time, for example, and the relevant factors are more likely to come to light.

Linking education outcomes to school financing represents a recent paradigm shift in education. An important point to be noted here is that funding alone cannot make a difference—efficient allocation of funding matters (Pritchett & Filmer, 1999). It has taken us many years to realize that school input-driven solutions have not improved student learning (Aiyar, 2013). Looking at outcomes and backtracking to see if school funding was a problem is a process that has been adopted by multiple NGOs. For instance, Janaagraha, an NGO based in Bangalore, initiated the Public Record of Operations and Finance (PROOF) program in July 2002 in partnership with three other citizen-based organizations.4

This coalition of NGOs conducts site visits to city schools and collects school performance indicators through questionnaires (e.g., repair maintenance of school building, availability of a water facility). School visits sometimes result in an immediate sanction of school water facility and repair-work orders, depending on the scorecard details. The program coordinators help the schools to update their budgets, which are then reviewed for the next financial year. The central idea underscoring this activity is matching the quality of education and the teaching learning material supplied to the school with their respective budgeted amounts. Thus, performance measurement is linked to the budget cycle, which demands more accountability. The process aims to understand the school system and its weaknesses, while using community ownership of the school to undertake reforms.

IV. RECOMMENDED ACTIONS TOWARD IMPROVING LEARNING IN AFRICA POST 2015

1. Reach the unreachable

Policy interventions targeting out-of-school children have been centered on traditional demand and supply solutions: encouraging on-time registration in Grade 1 and automatic promotion throughout primary school, building more schools, providing flexible schooling hours and systems, providing micro-enterprise support for poor households with monetary and in-kind support to increase school retention (Sabates, Akyeampong, Westbrook, & Hunt, 2010). Yet, the suggested interventions fail to properly target overage children who have never enrolled in school. Sending them back to regular school is likely to increase their chances of dropping out. As Sabates et al. point out, the older a child gets, the greater his/her chances of not completing the basic cycle of primary school. There is a need for a parallel non-traditional school structure that could welcome that particular cohort of overage adolescents who have enrolled in school, teach them basic literacy and numeracy skills, and prepare them for either the labor

4 The other three organizations are the Public Affairs Centre, Voices, and the Center for Budget and Policy Studies.
force or for vocational school. Economic incentives could be provided to those adolescents so as to minimize the opportunity cost of staying in those programs specifically designed for them.

Also, since most out-of-school adolescents are in conflict-affected countries and situations in which going to school comes with threats to personal security and safety, the post 2015 agenda should include partnering with countries to expand peace building in sub-Saharan African countries and promoting viable democracies that promote the rule of law at all cost. The Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda (2013) includes building peace and effective, open, and accountable public institutions among the five transformative shifts needed for global sustained prosperity: “personal security, access to justice, freedom from discrimination and persecution, and a voice in the decisions that affect . . . lives are development outcomes as well as enablers.” No progress on education for all can be made without creating a macro social environment where families have built stable lives. The plight of refugees who are uncertain about their camp dwelling and whose children are not even identified in the global measures on educational attainment says it all. Action is thus needed from the global community to move from rhetoric to initiatives and mechanisms aimed at preventing and ending the cycles of conflicts in sub-Saharan Africa.

2. Measure learning and share results

To date, no single sub-Saharan African country participates in PISA and only a few administer TIMSS (Botswana, Ghana, Morocco, South Africa, and Tunisia). However, initiatives such as UWEZO, modeled after ASER in India, could be expanded throughout Africa by requiring countries to put in place structures that foster low cost assessments of children's learning skills at the local, regional, and national levels. Such efforts could help determine which policy interventions or reforms are needed to improve children’s learning. UWEZO’s model involves community participation by partnering with local organizations in administering the tests and publicizing the results on national TV stations and in newspapers. With such visibility, communities are anxious to see their ranking, which schools outperformed other schools, and which schools are struggling. Furthermore, civic awareness is heightened and accountability is held at the highest standard. It is possible that UWEZO is paving the way for a new strategy to impact education policymaking. The post 2015 agenda could integrate UWEZO's approach as a push for the change that is needed to ensure that learning is indeed taking place in African schools.

3. Prioritize school readiness initiatives

Children must be reached before the age of compulsory schooling, while they are mostly based at home during the crucial developmental years. This time period is often marked with inadequate interactions or resources to maximize their development. Linking early childhood programs to primary education is a cost-effective way to ensure timely school enrollment. A proactive approach to improve school-readiness and school attainment is needed, utilizing the significant opportunity to maximize children’s developmental potential and learning skills through a multi-sector approach that includes education and health support and awareness at the community level.
In addition, equipping caregivers with better knowledge of child rearing, including behavior skills development and knowledge building, can also help caregivers become active participants in children’s survival and development (Vargas-Baron, 2005). Twum-Danso (2009) implies that even when sufficient education policies are in place, they cannot be realized unless the policies take into account children’s families and their immediate environment. Thus, helping families and caregivers to adopt child-responsiveness can positively affect the child’s health, education, and development; this not only improves the child’s psychosocial development, but also expedites and strengthens the child’s physical and cognitive development and health (Esher et al., 2006).

According to Esher et al. (2006), responsive parenting refers to “a basic parenting tool” that helps the caregiver interact with the child in an appropriate and stimulating way by strategically reading the child’s cues. A study also proved that ECCE interventions showed the best results, especially in psychosocial development, when responsiveness training was combined with nutritional supplements (Grantham-McGregor, Powell, Walker, & Himes, 1991). Simultaneously, when programming caregiver education, various factors must be brought to attention. Firstly, programs must reflect on appropriateness and adequacy when considering the education level of caregivers. In Ghana, 45.9% of head caregivers are not adequately educated and have no experience in schooling (UNICEF, 2009). Also, parental education and its curriculum should not be limited to mothers, since 73.1% of head of households in Ghana are reported to be male (UNICEF, 2009).

4. Use technology to improve student learning and teacher professional development

Mobile technology provides a boon to education research, as it allows us to collect and disseminate data in real time. Various projects at the Earth Institute use mobile phones to record and disseminate results of literacy and numeracy assessments. One of the major benefits of these endeavors is increased awareness of children’s learning progress. As a result, interventions can be designed to improve the learning outcomes of the actual students who are assessed. Access to clean and quick data enables faster sharing among various stakeholders. MVP uses a mobile-based data collection system that allows data collecting and sharing on a regular basis. A sample of data shared using School Report Cards is given in Figure 7. Sharing data on student learning allows community leaders, school administrators, and district government to have a common platform for education discussions. These discussions also generate processes that attempt to resolve issues at the local level.
Furthermore, literacy and numeracy assessments can benefit teachers, as well. Teachers tend to agree on the importance of assessment but when assessments are summative and conducted at the end of a period of schooling, teachers do not always have the chance to improve pedagogical practices, curricular
materials, or classroom management strategies in time to apply them to their class for that school year. When assessments can be done quickly, teachers can use the test results to inform their plans for upcoming lessons.

We have only just begun to assess the development of other skills linked to social and civic awareness and technology that has permeated life and classrooms in Africa. Organizations like Cybersmart Africa in Senegal have integrated local technologies with participatory and active learning techniques, but very little other research exists to document the development of UNESCO’s 21st century learning skills in classrooms untouched by local or international NGOs and donors. In fact, research is currently underway to define and measure so-called “global competencies,” such as civic values, critical thinking, and problem solving by the Learning Metrics Task Force (Winthrop & Soliván, 2013) and others (Crouch, Perlman, & Greubel, 2013). All of these interventions are relevant to the post 2015 context in that they don’t merely focus on access to education, but instead address specific aspects of quality.

5. Innovative educational financing

Public-private partnerships (PPPs) are becoming increasingly prominent in educational financing and, despite the existence of several concerns, form a promising area of educational financing that will be much needed to facilitate improved learning outcomes post 2015. Major donors to education, including the World Bank, USAID, the Department for International Development (DFID), and the German Organization for Technical Cooperation (GTZ), use the term PPPs “to cover private provision of public services under contract, co-financing of development initiatives, or even private education that receives no government subsidy” (Draxler, 2012, p. 45). Such forms of partnership are usually covered by contractual agreements and when a partnership is not, “it is generally a matter of collaboration with large transnational corporations” (Draxler, 2012, p. 45), mainly through corporate social investment (CSI).

In their analysis of the World Bank’s Education Statistics source called EdStats, Barrera-Osorio, Guaqueta, and Patrinos (2012) provide empirical evidence on the role of PPPs in education. Their main conclusion is that “evidence from around the world shows that the correlation between private provision of education and indicators of education quality is positive” (Barrera et al., 2012, p. 211), based on analysis of test score performance. In addition, PPPs have at times benefited marginalized populations who are usually left out of the public education system by rapidly expanding access to education at low cost (Barrera-Osorio et al., 2012, p. 211). Evidence from Colombia and Venezuela shows that “private management of public schools has a positive impact on student test scores” (Barrera-Osorio et al., 2012, p. 212), though it remains unclear precisely which factors contribute to this increase in quality. It also remains vague which studies or specific regions the evidence presented by Barrera-Osorio et al. (2012) is based on, which seems to be recognized by the authors as they state that “there is a need to evaluate how PPPs work most effectively in different contexts . . . and more research is also needed on universal vs. targeted school choice and on private finance institutions” (Barrera-Osorio et al., 2012, p. 213).
LaRocque (2008) looks specifically at PPPs at the basic education level in a wide range of countries. One of his main conclusions is that “PPPs are often targeted on populations who are being poorly served by existing education delivery systems” (LaRocque, 2008, p. 50). LaRocque supports his argument with the case of so-called Concession Schools in Bogota, which are public schools managed by “private schools with proven track records of delivering high-quality education” (LaRocque, 2008, p. 15). More specifically, “private schools and/or educational organisations bid in a competitive process for management contracts of newly built schools in poor neighborhoods of Bogota . . . and these schools must provide educational services to children who are poor” (LaRocque, 2008, p. 16). These management contracts last for fifteen years and the Bogota Ministry of Education conducts regular quality assessments in order to ensure that academic objectives are reached. This program has shown improvements in school management with more efficient allocation of resources, as well as increased demand for such schools among the poor populations of Bogota (LaRocque, 2008, p. 16).

van Fleet and Zinny (2012) analyzed the evidence on corporate social investments in education in Latin American and the Caribbean between 2009 and 2010. Multinational corporations based in Latin America “are now responsible for 2.1 million employees in the region and approximately $780 billion in annual revenue” (van Fleet & Zinny, 2012, p. 1). By looking at the 100 largest multinational corporations in Latin America and the Caribbean, they conclude that “67.3 percent [of these corporations] direct social investments and philanthropic contributions to education” (van Fleet & Zinny, 2012, p. 4), and the total value of these investments is estimated at “$560 million annually” (van Fleet & Zinny, 2012, p. 4). Investments in education, which were mainly cash contributions, averaged $8.5 annually; the smallest contribution of a company was around $100,000 and the highest was $72 million (van Fleet & Zinny, 2012, p. 6). This clearly raises hopeful notions of potential educational financing in sub-Saharan Africa now that corporate interest in the region is rapidly expanding.

Barrera-Osorio et al. (2012) point out four areas critical for increasing the efficiency of PPPs (p. 209). First, they stress the importance of clearly defining the role of private providers in national education strategies, as well as clear legislation about their activities. Second, governments should find “a balance between quality control policies and overly restrictive entry criteria” (Barrera-Osorio et al., 2012, p. 209) in order to prevent discouraging future private providers of education from entering the market. Third, school-funding systems should “integrate public and private schools and . . . [be] neutral, responsive, and targeted” (Barrera-Osorio et al., 2012, p. 210). And fourth, improved quality assurance mechanisms as well as accountability systems should be developed in order to ensure the delivery of high quality education (Barrera-Osorio et al., 2012, p. 210). Additionally, van Fleet (2012b) argues that corporations should “assess and identify how their core business competencies can address global education challenges,” (p. 3) which could increase the sustainability of corporate involvement in education.

Specifically, van Fleet argues that companies need to “go beyond vocational training to support general education, starting early,” (van Fleet, 2012c) as “communication, teamwork, problem solving, and conflict management” (van Fleet, 2012c) are becoming highly demanded skills in the labor market and children usually acquire these skills at earlier stages of the education system. Second, clear benchmarks need to be adopted that “measure learning outcomes and promote equity, and monitor results” (van Fleet, 2012b, p. 3) in order to more easily identify best practices. Third, increased alignment is needed
with governments, civil society, development institutions, and other corporations in order to improve coordination of efforts. Fourth, more focus is needed on capacity building in public institutions in order to ensure that marginalized children are included and that quality education at a larger scale can be provided. Related to this, companies need to “stop corporate tax evasion . . . [by] instituting government anti-corruption and transparency measures” (van Fleet, 2012c), as this could greatly increase the financial capacity of governments to invest in education. Fifth, corporations should “play a leadership and advocacy role” (van Fleet, 2012b, p. 3) in order to promote education as a “priority at the highest levels of political leadership” (van Fleet, 2012b, p. 3). Last, improvements in human resource policies “to be pro-education and learning” (van Fleet, 2012c) could have a large impact by increasing adult literacy rates and by developing “early childhood centers for children of employees” (van Fleet, 2012c). In sum, the existing literature presents a number of promising areas for improving the efficiency and impact of PPPs in education that should be critically explored in the development of the post 2015 agenda.

6. Increase focus on school safety

School safety has consistently been an area of study that has not received much attention, although recently there has been an increasing focus on education in conflict settings. In 2004, the Inter-Agency Network for Education in Emergencies (INEE) released the first Minimum Standards for Education to enhance the quality of education in emergencies and “increase access to safe and relevant learning opportunities and ensure accountability” (p. 4). Additionally, there has been a recent trend toward child-centered spaces (CCSs). CCSs, usually run by the local community, provide children with physically safe spaces, psychosocial support, and problem solving-focused education.

Winthrop and Kirk (2005) have analyzed lessons learned from CCSs and emphasize the need for teacher development programs in conflict settings affected by acute teacher shortages, as they found that teachers often felt a lack of confidence and struggled to effectively incorporate psychosocial concepts into pedagogy. Additionally, Winthrop and Kirk (2008) argue that a major way to improve students’ well-being “is through education programs that prioritize the quality and relevance of students’ learning” (p. 658). Doing so helps children affected by conflict to regain a sense of agency, which they need in order to effectively contribute to the development of their communities.

Besides conflict, there are several other factors that affect school safety and consequently complicate access to education as well as educational performance. Sexual abuse continues to be a major barrier to the creation of safe learning environments. Ruto (2009), in her study of sexual abuse of school-age children in Kenya, states that up to 24% of Kenyan students in her study identified schools as unsafe venues; 68% of girls and 51% of boys in her study had been sexually assaulted. Also, while teachers are often thought of as role models for their students, over 16% of the girls in Ruto’s (2009) study stated that they have been sexually propositioned by their teachers and 17.4% of girls actually entered into relationships with these teachers, often in exchange for pocket money. Del Rosso and Marek (1996) argue that poor nutrition and health have been another major barrier to school safety and, consequently, educational performance. To illustrate, a report by the NGO Youth Alive (2009) states that recent commodity price increases have complicated people’s access to food in Kenya, which has, in turn,
led to increased school dropout rates as children are forced to engage in income generating activities to ensure their immediate survival.

UWEZO conducted research on school safety issues in Kenya in 2011 and found that the environment (drought and excessive wind and rain), infrastructure (damages reported to walls, classrooms, and latrines), animals (disruption due to hippos, elephants, and snakes entering school grounds), as well as disturbance (drunkards and thieves disturbing lessons) were reported by school officials as major barriers to safe and stimulating learning environments. It should be noted that it is hard for NGOs like UWEZO to collect data relating to certain safety incidences, such as sexual abuse, as students, teachers, and parents may not feel comfortable discussing these topics.

In 2008, the Kenyan Ministry of Education introduced its Safety Standards Manual for Schools. Kenya's first official public guideline to improve school safety emphasizes the importance of safety in education for children—in early age when they are most vulnerable to intimidation, abuse, and harassment. However, as reported by UWEZO, a high percentage of schools in Kenya continue to lack school fencing, school safety manuals, safety committees, or counseling offices. Additionally, schools that did not report any incidences did not have significantly more safety measures in place, illustrating that school safety continues to be a highly complicated problem to tackle. Yet, the existing qualitative and quantitative evidence on school safety in sub-Saharan Africa confirms that safety barriers continue to complicate school enrollment as well as educational performance. It is therefore of critical importance that more efforts are developed to better analyze school safety incidences in educational systems, and increased measures proposed that could prevent these incidences from happening post 2015.

7. Return to a rights-based approach to education

Three key rights-based United Nations’ conventions significantly pertain to ensuring inclusive, safe, and accessible education for the world’s students. Article 50 of The Geneva Conventions, the treaty of international humanitarian law and protection of civilians in time of war, also states that authorities and the Occupying Power are responsible for facilitating the working of institutions for the education of children (International Committee of the Red Cross, n.d.). Article 10 in The Convention on the Elimination of All Forms of Discrimination against Women adopted in 1979 calls for equal access to education for women, protection from discrimination, and ensuring elimination of discrimination (United Nations Human Rights, 1979). The Convention on the Rights of the Child (CRC) of 1989 provides a framework that signatory countries use to develop policies and implement programs protecting and developing the best interests of children.

CRC remains a key foundation for promoting a range of rights for children and social rights; a right to education is one that has been supported by numerous countries that have made primary education a requirement in alliance with the MDGs. Disabled children, though, are often excluded from education for various reasons including economic, physical limitations, lack of specialized teaching and learning spaces, and lack of government and donor target allocations. Children with disabilities are less likely to be attending school and less likely to graduate to advanced levels than children without disabilities (UNICEF, 2013). The Convention on the Rights of Persons with Disabilities, adopted by the UN in 2006,
presents in Article 24 the responsibilities of signed parties to the education sector for social inclusion of disabled persons, where equal access and supportive programs are to be ensured (United Nations Enable, 2006). Disabled children constitute a sizeable portion of the out-of-school population at the primary level, with estimates at 30% (UNESCO, 2008).

All children have the right to an education in a safe learning space, but safety can disappear when disasters, man-made or natural, affect a community. Tsunamis, hurricanes, floods, and earthquakes are just some forces of Mother Nature that can destroy classrooms and materials, sweep away people, and kill. Implementation of disaster risk reduction (DRR) in educational institutions should be on the forefront of the post 2015 agenda. Ensuring that classroom construction meets code, inspections happen, and DRR curriculum is integrated into schooling are a few ways to support community resilience and establish disaster preparedness. What to do, where to go, how to stay safe, and how to help can be integrated into stories, lesson plans, and school-based management committees. In order to minimize the effect of disasters on school communities, stakeholders must be engaged, educated, supported, and committed to DRR.

Learning assessments, learning technologies, learning assessments, remedial programs, out-of-school children, pedagogical approaches, school financing, teacher quality . . . so many issues to address within the education sector from macro to micro level, though progress has been made. With funding and policy commitment for the post 2015 agenda, more progress and more impact needs to occur to maximize each child’s right to a quality education and ensure a committed cadre of local educational professionals. Implementation and achievement of the Sustainable Development Goals will require an educated work force. Therefore, bringing education-related issues into the political agendas and election campaigns of political parties may help policy makers and citizens notice and prioritize these issues and lead to action plans. Action plans for education should be debated in national parliaments like all other issues, and citizens should not accept excuses if education-related challenges are not being addressed.
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