

Sustainability **2013**, *5*, 3447–3472; doi:10.3390/su5083447

OPEN ACCESS

sustainability

ISSN 2071-1050

www.mdpi.com/journal/sustainability

Article

Rethinking Education for All

Ellen Carm

Faculty of Education and International Studies, Department of International Studies and Interpreting, Oslo and Akershus University College (HIOA), Pilestredet 40, PB 4 St. Olavs plass, Oslo NO-0130, Norway; E-Mail: Ellen.Carm@hioa.no; Tel.: +47-22452114 (or +47-97720123); Fax: +47-22452121

Received: 8 June 2013; in revised form: 16 July 2013 / Accepted: 1 August 2013 /

Published:

Abstract: The rationale for this paper is contextualized within a broader national and international agenda of reaching Education for All (EFA), knowledge transformation and production with an overall focus on Education for Sustainable Development (ESD). Whose education and whose development is at issue? The purpose of this paper is to reconceptualize EFA in a broader developmental context. Definitions of formal-, non-formal and informal education are applied in order to analyze the epistemological perspectives underlying the educational achievements more than two decades after Jomtien in 1990. Concepts of contextualized expansive education and object-oriented learning will be used to reveal the systemic causes of the challenges the individual actors experience in their daily learning activities. Two case studies further illustrate how a broad stakeholder involvement through collective design and implementation created innovation and educational transformation that contributed to relevant and sustained learning/knowledge and development at an individual and community level. The paper argues that in the current sociocultural context, responses to EFA need to be based on a comprehensive national education strategy, situated in the local context. By creating space for educational innovation, through interaction and negotiation, the confluence of the epistemological lenses characterizing formal, non-formal, and informal learning could ultimately be a strategy to adequately respond to the diversified learning needs of the population and sustainable development of the country. One expected outcome of the paper is a contribution to the future strategies of EFA beyond 2015, built on the urgent requirements for inter-professional partnership and collaboration through a multidimensional approach to education and learning.

Keywords: Education for All; education and sustainable development; formal; non-formal; informal education; transformative education; relevance; Indigenous and Western knowledge; expansive learning

1. Introduction

The purpose of this paper is to reconceptualize Education for All (EFA) in the context of Education for Sustainable Development. By highlighting the main EFA discourses over the past two decades after Jomtien (1990), using the epistemological lenses based on Coombe's (1974) [1] definition of formal, non-formal, and informal education and Fullan's (2008) [2] theories of educational transformation, renewed approaches to educational innovation and development emerge. The author is applying Engeström's [3,4] third generation of expansive learning to visualize how we must go beyond the existing borders, and move outside the "box" in order to open up for a renewed focus on EFA after 2015, that contributes to enlarging our perceptions of EFA, responding to the diverse landscape of learners in a rapidly changing world. The paper further refers to two different case-studies that illustrate how educational transformation can take place, provided some key institutional and process elements are adhered to. In the following, the link between education and development will be briefly described and some key critical EFA discourses relevant in this context will be highlighted in a developmental context in order to further elaborate on the need for transformation and change given the educational landscape towards 2015.

1.1. Education and Development

In 1916, John Dewey realized that in a mobile and changing society that "is full of channels for the distribution of a change occurring anywhere, must see to it that its members are educated to personal initiative and adaptability. Otherwise, they will be overwhelmed by the changes in which they are caught and whose significance or connections they do not perceive" (in Sharples *et al.*, [5], p.1). From this point in time, a range of theories have been generated that link education to development. They are all influenced by the dominant international policy position whereby universal education is viewed as one of the key global priorities of achieving development, Saha and Fägerlind (1989) [6] and McGrath (2010) [7]. The theories may be clustered into three main categories:

- (1) One category focuses on individual growth, development, and empowerment (Freire, 2007) [8].
- (2) Others take a human rights perspective, specifically the right to education and participation based on international agreements (e.g., Universal Declaration of Human Rights, and Convention on the Rights of the Child) where all children, youths, and adults have the right to benefit from an education that will meet their basic learning needs in the best and fullest sense.
- (3) Through the lenses of Human Capital Theories (HCT), education is also viewed as a prerequisite for societal development.

How we understand development, and the link between education and development in the contemporary context of a globalizing world, will of course depend upon how we understand the process of development and globalization. No longer can any country regard itself independently of others, as any strategy related to social development may succeed or fail not only due to factors within a country's borders, but also due to outside factors [6]. Many writers have acknowledged the multidimensionality of development, although the interrelationship between the dimensions is still to be explored. One assumption is that education cuts across what Saha and Fägerlind [6] identify as three important development dimensions, the economic, the cultural-ideological and the political.

Based upon these assumptions, the importance of education as a means for development will be discussed as some of the main challenges. The paper will, in the following, address some of the main challenges that global strategies are now facing by highlighting some of the global EFA discourses more than two decades after the launch of The World Declaration on Education for All, Doyle [9].

2. EFA Discourses

2.1. The Scope of EFA

During the EFA conference in Jomtien, 1990, the discourses related to schooling centered on learning for life and learning for sustainable development. The World Declaration aimed at meeting the basic learning needs of every person, e.g., child, youth and adult. It endorsed education as a fundamental right, and also the understanding of education as a tool to help ensure a healthier, more environmentally sound world, contributing to personal and social improvement as well as economic and cultural progress. EFA further addressed the challenges related to scale and scope of the declaration and the complexities of those challenges.

According to Banda (2008) [10], the EFA conference in Jomtien presented an epistemological “tree”, with many branches underpinning the achievement of its goals, e.g., a relevant curriculum, mother tongue use in school, adult literacy, girls’ education, lifelong learning, education for adaptation, universal primary education, primary education, inclusive learning, education beyond access, practical and life skills, early childhood learning, and quality and access [10]. The “tree” comprised several educational objectives to be reached through EFA, had an inclusive and a life-long learning perspective, and in addition to access, illustrated how the various branches also focused on relevance, local adaptation and quality. These views are also shared by Save the Children (2013) [11] stating that EFA comprised a broader set of educational ambitions and discourses, concerns beyond school access, e.g., inclusiveness as well as school quality.

Semali (1999) referred to in [10] further suggests that the EFA tree will blossom only through a hybridization of African Indigenous Knowledge Systems (IKS) and formal school curricula, e.g., academic knowledge. A consequence of such a multiple understanding of EFA implies an interface between IKS and Western Knowledge Systems (WKS) that reflects cultural and societal relevance as well as encouraging the use of multiple methodologies, competences and types of education. This coincides with Saha and Fägerlind [6] who state that many countries find themselves caught “with one foot in the traditional and the other in the modern” ([6], p. vii) as if the modern and the traditional are in competition. They further claim that “a greater recognition of the benefits of the traditional in the modern will ease the transition and development process, “building upon the traditional rather than replacing it”. Thus, one would assume an emerging area for an exciting and rich diversity in the way countries develop, expand and transform their educational sectors around the world, but what did happen in the aftermath of these global commitments?

In Dakar, at The World Education Forum, 2000, the global leaders, including government representatives, development agencies, members from the civil society and private sector, as well as international and regional agencies, met to develop a global action plan. They agreed upon a broader set of Millennium Development Goals (MDG), to be reached by 2015, with an expanded vision going

beyond EFA, also called the Dakar Framework of Action. Out of the eight MDGs, achieving universal primary education was again singled out as a separate goal, to follow up on the EFA strategy. Education still played a central role in the global developmental discourse: a commitment to provide quality basic education for all children by 2015 and ensuring gender equity.

Saha and Fägerlind [6] stated in 1989 that most discussions about educational plans and strategies focused on formal education, and less emphasis was paid to adult and lifelong education. This coincides with Odora Hoppers (1994) [12] arguing that the Jomtien conference focused disproportionately on formal primary schooling. She claims that it was ‘School for All’ just being labeled ‘Education for All’. Torres (1999) further elaborates on this in [10] by identifying the “shrinking” vision of EFA from universalizing basic education to universalizing access to primary education, e.g., enrolment in school. The review session of EFA achievements held in 2000 (Dakar, Senegal) also revealed that many countries treated EFA as access to schooling as an end in itself (Coppens, 2006) [13]. In line with the authors quoted above, I will argue that the current EFA discourses still clusters around issues related to how to improve or revise formal schooling in order to meet the MDG goal.

Considering the great number of children now enrolled in primary schooling, there is no doubt that the global commitment reflected in the EFA and MDG goals have played a significant role in facilitating progress towards achieving primary education for groups previously deprived of access to education. Over the last two decades, there has been an impressive increase in access, specifically focusing on low and middle income countries: “In 1999 there were over 102 million children out of primary school; by 2010 that number had fallen to 61 million” ([7], p. 11). The number of primary school age children out of school has fallen from 108 million to 61 million since 1999.

However, the challenges we now are facing also tell another story. Three-quarters of the reduction in the number of children without access to schooling was achieved before 2004, and between 2008 and 2010 progress has stalled altogether. In Sub-Saharan Africa, as an example, the numbers of out of school children increased by 1.6 million between 2008 and 2010, despite the general global statistics showing an increase in the number of children with access to primary schooling. Chinapa (2012) [14] claims that guaranteeing education of quality for all remains one of the greatest challenges of the 21st century.

Secondary education, on the other hand, has been ignored due to the focus on primary, leading to massive drop/push outs of school-going children [7] after primary level, which is clearly evident from recent statistics. The lower secondary gross enrolment ratio was just 52% in low-income countries in 2010. This still leaves millions of young people to face a life without the basic skills they need to earn a decent living. The number of out-of-school adolescents of lower secondary school age, according to The Global Monitoring Report (GMR) 2012 [15], was 71 million in 2010, exhibiting stagnation since 2007 ([15], p. 80).

In 2010, the global adult illiteracy rate was 16%, which represents about 775 million adults, mostly women. The progress in reducing adult illiteracy has also slowed in recent years; from a decrease of almost 100 million in the 1990s, the number of illiterate adults fell by less than 8 million between 1995–2004 and 2005–2010 [15]. Over half of all illiterate adults live in South and West Asia, and over one-fifth in Sub-Saharan Africa. The number of illiterate adults has grown by 27% over the past

20 years in Sub Saharan Africa, In South and West Asia, the number of illiterate adults has increased slightly.

According to the GMR [15], the reason illiteracy rates and the number of illiterate and semi-literate adolescents is so high is that some still never make it to school or are likely to drop out of school early. Young people aged 15–29 had not become literate even after completing basic education, which is also the case for some who have attended secondary school.

Nearly 25 years after Jomtien and the global EFA initiatives, data on learning outcomes achieved by children in school show a large number of countries performing poorly while learning assessment results are stagnating and even getting worse [11]. Out of the 14 countries participating in the Southern and Eastern Africa Consortium for Monitoring Education Quality (SACMEQ) assessment, six achieved poorer aggregated scores on reading in 2007 than they had in the previous 7–12 years. This coincides with similar findings from India in 2012, where the absolute levels of learning are declining. Some of the challenges facing the educational systems and structures, which at the same time impact the individual learners and their access and completion, will be elaborated on in the following.

2.2. *Inclusiveness*

The GMR [15] clearly spells out how education still is unequally distributed globally. Geographically, in terms of gender, across the urban and rural divide, ethnic minorities and poverty, still causes huge disparities regarding access. The rural poor, women and other marginalized groups are still those deprived from the right to education. Torres (2001) [16] elaborates on the same issue when arguing that among the huge numbers of out-of-school adolescents, most of them are living in extreme poverty. Centered on the education system and its focus, Torres (1999) [17] points at what he calls the failures of EFA as the system itself is a vehicle for polarization, marginalization and exclusion and, therefore, a tool for internal division and external domination. The system is unable to generate a partnership of equals or a culture of peace and justice, competence, innovation, and collective confidence building; therefore, it is not a vehicle for achieving universal basic education.

The EFA strategy presents all education as beneficial and ignores some of its negative effects, Banda [10] argues and emphasizes that we must realize the education system is not only structured to continuously expel and stigmatize its rejects, but also to sever all ties with them, with traumatic consequences for learners of different age groups that are being “pushed out” of the system for different reasons.

2.3. *Examinations and Certificates*

The formal school curriculum’s main emphasis is on passing examinations and obtaining certificates for job allocation. Fuller (in Little, 2002) [18] argues that, “To educate a million you have to create systems and institutions. You need to grade and certify, arrange exams and diplomas—and that’s where the problem arises, because the business of grading, certifying and awarding diplomas can overshadow the business of educating. The examination tail comes to wag the educational dog”.

Quality in education, as agreed upon at the World Education Forum (WEF) in Dakar, 2000, “refers to excellence in teaching and learning so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills” Kanjee, *et al.* ([19], p. 86). This reinforces the notion that formal school education is needed to help one get a job, and not necessarily to help one do the job better. Globally, the international educational targets focus on educational outcomes, and in practice, are often limited to the levels of numeric and literacy skills the children or youth acquire at the end of a learning or schooling cycle. This is “demonstrated clearly in the Education for All goals. One may even argue that the EFA goals are actually responsible for this narrow view”, Coppens [13] argues. The qualitative and process related objectives are less frequent when measuring and comparing educational systems. This limits the scope when evaluating learning efficiency and school effectiveness and reduces the outcomes to quantitative standards.

The concern for quality education, focusing on equity and diversity, contradicts the narrow focus on external prescriptive standards, based on national and international consensus turned into global assessment tools. One way of overcoming these challenges is to maintain the broad definition of EFA as previously discussed. By so doing, educational strategies and structures have to be tailored to meet relevant national as well as individual needs, situated in the local context.

2.4. Quality and Relevance

According to Torres ([1], p. 16) quality education should be understood as:

...an education that includes learning to know, to do, to live together and to be. It is an education geared to tapping each person's talents and potential, and developing learner personalities, so that they can improve their lives and transform their societies.

This definition of quality education embraces the three main drivers of EFA: (1) why education is viewed as one of the key global priorities of achieving development; (2) focusing on each person's right to individual development of his/her potential and talent; and (3) thereby, improving their own lives as well as taking part in supporting the transformation of their societies.

Research by Caillods *et al.* [14] suggests that the quality of education should ensure that children learn, and that what they learn is relevant to their needs. Quality of education, then, must be geared toward enhancing each individual's potential and the full development of a learner's personality. Haves and Stephens [20] argue that the learning outcomes should be understood as knowledge, skills or behaviors that a student is expected to exhibit after a period of study that reflects a nation's interests and priorities concerning the ‘quality’, relevance and level of knowledge acquisition among learners. The learning outcomes in a school or a classroom should, therefore, also reflect the wide range of diversities and abilities characterized by the students' individual needs in a given context and time.

Saha and Fägerlind [6] realized that any society should utilize the benefits of the traditional in the modern to ease the transition and development process. Odora Hoppers, in A. Breidlid [21] also questions the demarcation between the Western, so-called modern, and Indigenous knowledge systems. Quality education enables the learners to develop their potential, not considering age group or type of education, but rather enhance diversity to meet the needs of the individual learner. In other words, educational strategies and legislation must therefore ensure that what is embedded in tradition

and culture are reflected and recognized as valuable knowledge within the educational sector, it being Western or Indigenous knowledge systems, delivered through formal, non-formal or informal approaches to learning.

2.5. Learning for Life

To meet the learning needs of all young people and adults through equitable access to appropriate learning and life skills programs, the MDG [15] acknowledge that the formal general education and technical and vocational secondary education as the global educational strategies have focused on so far only capture one part of the skills picture needed in our societies today. The MDG Report further argues that without better opportunities for education and skills training, “many young people will remain trapped in subsistence living” ([15], p. 259).

The report further underscores that young people, specifically those living in urban as well as rural poverty need a second chance to learn basic skills. Many, so called second-chance opportunities are targeting children who have missed the opportunity for schooling or been pushed out. However, the MDG report further argues that by organizing different reentry schemes into primary and secondary education for out-of-school youth, one may be able to reach out to a broader cohort of learners. It is realized that in addition to basic literacy and numeracy, the curriculum should incorporate life skill subjects and/or vocational education and microenterprise activities. However, it is vital for these activities to be extended to 15–24 year olds, those who also need a second chance. “Second-chance programs aim to provide basic skills corresponding to the primary education curriculum so as to improve young people’s employability. Practical curricula that offer technical skills, together with flexible schedules and less formal instruction methods” ([15], p. 265), are being viewed as the most attractive offer in order for young people to catch up. The catching up approach also relates to the formal educational structure, creating opportunities for reentry schemes.

Many of the learning activities categorized as second-chance programs are generally provided by nongovernmental organizations (NGOs) or nongovernmental community-based organizations (CBOs) in ways that are flexible and oriented toward practical skills. Being designed and developed locally, these programs often adapt training, content and delivery methods to local needs, building upon existing culture to align with local and indigenous practices.

Part-time programs using local facilities help to improve participation by accommodating local constraints on time, mobility, and finances. The flexibility of locally designed programs can be particularly beneficial for young rural women who often have to balance training with other commitments that result in long working hours [16]; Carm *et al.* [15,22].

In the delivery, or modes of learning, media have also played a major role, using old information communication technologies (ICTs) such as radios, cassette players and loudspeakers, particularly in rural areas. Media’s role is rapidly increasing, where appropriate satellite, solar and fiber-optic technologies are operating. E- and M-learning is now increasingly used to complement the traditional technologies. According to UNESCO, 2009 (in Carm and Øgrim 2013) [23], the number of the world’s Internet users tripled between 2000 and 2007, and in the following two years, it increased by a further 50%. In the developing countries, the increase was even higher: from 2000 to 2007, it leaped from 76 million to 726 million according to Internet World Stats in [23].

The numbers of internet users in selected parts of the world show large regional differences, where Africa and Asia especially have a penetration rate far below the world average. Rapid change in technology development and access now shows that while internet users and broadband subscribers show a slow growth, fixed telephone lines show a slight decrease. The explosive growth now is among mobile phone subscribers all over the world during the last 10 years, a tendency even stronger in the South. This indicates the huge potential for strategic use of mobile networks for information and communication. PCs are decreasing as the dominant tool for Internet access, replaced by mobile hand-held devices [23]. In 2011, smart phones became the most used device for Internet connection. Accessibility, lower prices, and the emerging market for smart phones have created a wide range of Internet users globally. Internet and various distance-based formal, non-formal and informal education and learning opportunities are rapidly increasing and will play an even more important role in the years to come.

Governments usually leave these alternative learning approaches and initiatives in the hands of NGOs, whether international or community-based, along with the different life skills education programs (Garcia and Fares, 2008, in [15]) However, these initiatives can provide useful lessons, and can be integrated into a national curriculum as has occurred in Indonesia, Kenya, and Uganda (Leerlooijer *et al.*, in UNESCO, 2011) [24]. However, in order to replicate, scale up, and incorporate such programs into public education, it is crucial to explain the need for such programs to communities and others who will or could be involved ([15], p. 103).

How do we then take on board the advantages of these experiences more than two decades after EFA, and how do we apply this knowledge and experience to initiate and implement strategies that do not give us “more of the same”, but rather help us think out of the box”?

3. Epistemology and Learning

3.1. Out of the Box

Approaches to learning form an integral part of how we view knowledge. According to Kvale and Brinkman ([25], p. 4), epistemology is “the philosophy of knowledge and involves long standing debates about what knowledge is and how it is obtained”. In other words, epistemology asks what knowledge is and how to create it. They further define knowledge as “neither inside a person nor outside in the world, but [...] in the relationship between the persons and the world” [25]. In other words, knowledge is constructed through the interaction between a person and his/her environment.

Due to the stagnation in recent years in overall literacy rates [15], I suggest there is a need to go deeper, bringing about fundamental transformations in how we view learning, how we apply various approaches in time and space and, in the post EFA/MDG era, move “out of the box” and turn schooling into more than formal education, transforming it into learning for life. By doing so, one has to embrace all forms of knowledge, e.g. knowledge as we know it from formal schooling, the so-called modern and Western knowledge, traditional and localized Indigenous knowledge, and knowledge created and reconstructed through informal channels.

Serpell [26], in his assessment of formal schooling in rural Zambia, argues for the importance of relevance, to move from subject orientation to themes or areas into even more comprehensive and

contextual learning environments. He strongly recommends a much broader variety and diversity of learning opportunities based on the needs of the learners, built upon, the learners' worldviews and their contextual, indigenous realities.

Sustainable educational structures and practices require national systemic and comprehensive policies and strategies reflecting the national as well as local needs. Every nation also interacts with the global society, and the national educational structure is not just depending upon internal policies and conditions, but also relates to global trends, comparisons and standards. I share the views of Saha and Fägerlind [6] when stating that a country's educational sector can never be viewed as a static entity [6]. To ensure an on-going critical review of quality and relevance, it requires continuous assessment, at all levels [3,4].

In order to move towards sustainable educational structures, there is also a need for a continuous search towards educational experimentation and innovation to ensure sustainable development of the country as well as for the individual learner. In the following section, some innovative approaches towards education for sustainable development are presented.

3.2. Sustainable Development

Aiming at a strategy for sustainable development, the United Nations and Economic Commission for Europe (UNECA) [27] developed an approach to Education for Sustainable Development (ESD) which is locally, nationally, regionally and globally contextualized to reflect the diverse landscape of all learners. The strategy also underscored that "ESD takes place in formal, non-formal and informal settings" ([27], p. 46).

Breidlid [21] argues that the strategy of ESD on sustainability is located within a Western epistemological paradigm, and he suggests that the UN organizations instead should start exploring how other knowledge systems can address issues of sustainable development in a more holistic way. Moreover, UNECA underscores that ESD happens not only through formal learning and teaching but through facilitation and support of non-formal educators operating in an informal and social context. These perspectives, it can be argued, could ensure a more inclusive and holistic approach to ESD, when situating the educational activities in the existing local context, bringing in other local actors and institutions to the learning activities.

By looking at experiences from higher education institutions, UNECA further identifies how and where innovations for sustainable development had taken place. They found that where higher education activities worked hand in hand with innovative lead companies and firms in different domains, through systemic collaboration between different activity systems, e.g., traditions and cultures of work, including research units, knowledge development and innovative industries, product development has proven to create centers of excellence, generating synergies and improved innovation and efficiency.

UNECA introduced issues and concepts related to sustainable lifestyles and sustainable entrepreneurship to African universities by combining different learning epistemologies and linking informal educational activities with formal education [28]. These approaches differed from one country to another, but the common challenges and constraints that were identified as commonplace in most countries were, in general, a poor education and lack of awareness and recognition of ESD, but

most importantly in this context, “lack of legislation and/or enforcement capacity, weak institutional capacity for monitoring and lack of decentralization to local authorities” ([28], p. 19). Localized ESD activities require national legislation decentralizing the responsibility for local adaptation to institutional level, and at the same time, ensure support and capacity building for monitoring and evaluation.

UNECA’s experiences drew upon successful innovation and practices in higher education institutions. However, it is timely to ask whether the same approaches could be utilized and reflected in how we organize universal education in a life-long learning perspective?

3.3. Schooling and Forms of Education

Schooling and education carry different meanings and definitions. Schooling deals primarily with the acquisition of knowledge: we learn to read and write and study various subjects in schools, but we are educated in the wider society. School is only part of this society ([10], p. 26). Kelly’s [29] views coincide with this statement, arguing that education goes on throughout life, from the cradle to the grave. Therefore, it embraces much more than conventional academic skills and subject matters. It also includes many other things, such as the acquisition of occupational and household skills, and even the formation of attitudes. Peters [10] argues that to be educated is not to have arrived at a destination; it is to travel with a different worldview. Similarly, Msango *et al.* ([10], p. 20) state that education is the process of bringing up children by adult members of the family and the society, a process of rearing children, of guiding, directing, and educating children, with strong emphasis on informal education. Education is a life-long learning opportunity, including both formal and informal learning.

The educational processes are traditionally divided into three forms of education: formal, non-formal and informal education. Coombs and Ahmed [30] provide the following definitions:

- Formal education is “the highly institutionalized, chronologically graded and hierarchically structured ‘education system’, spanning lower primary school and the upper reaches of the university” ([8], p. 30).
- Formal education is contrasted with non-formal education, which is “any organized, systematic, educational activity carried on outside the framework of the formal system to provide selected types of learning to particular subgroups in the population, adults as well as children” ([8], p. 30).
- Informal education is the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes, and insights from daily experiences and exposure to the environment, and is generally unorganized and unsystematic ([8], p. 30).

The formal school system is said to have rigid entry and exit points. In most countries, the formal school system views knowledge as something obtained in the classroom where the learning process is facilitated by the teacher. In many rural places in the global South communities, many find it problematic if not impossible to follow the schedules of formal schooling [12] because of subsistence farming and seasonal fishing. Schools are not flexible enough to accommodate such schedules, leading to low school attendance during these periods [10]. Moreover, the content is dominated by Western knowledge, alienating the learners situated in environments adhering to local IKS [21,26].

Schuller (2003) in ([10], p. 53) questions the wisdom of ignoring other forms of education from pupils’ environments, asking: “How far [does] the growth of formal learning [crowd] out other types

of learning which may be more enjoyable and more effective? Are we neglecting the resources, which are readily available from communities around us, and the innate ability, which people have to learn from their peers?”

Van't Rood [31] argues that what characterizes the rules and the division of labor in the formal school setting seems to contrast the findings from how successful non-formal education activities are being organized. His findings from a comparative study of several different non-formal education programs in Africa showed that one of the key success criteria was that the project receptivity should “reflect the needs of the participants”, where the “motivation of all concerned [appeared] to be an important factor” ([31], p. 176). In order to achieve success, the programs had adopted an infrastructure that emphasized a democratic decision-making procedure, was participatory, and included the recruitment of women. They also ensured collaboration and meetings between the various stakeholders; adjusted the teaching hours according to the participants' daily routines; and built the methodology and didactics upon the participants' perceived realities, preferably using the mother tongue of the learners.

Non-formal education, according to Coombs and Ahmed [1], exists outside the framework of the formal system to provide selected types of learning to particular subgroups. The epistemology of non-formal education activities can be described as flexible in structure, content, purpose, and delivery mode. It is needs based and participatory, cross-sectoral, multileveled in its structure, multi-purposed and multi-channeled in its delivery, and organized as multigenerational activities rather than graded by age-groups.

Informal education, then, is to be viewed as a lifelong learning process, generally an unorganized and unsystematic way of learning where people acquire knowledge and skills from the daily family life, through their upbringing, by interacting with peers and their wider environment, as well as acquiring knowledge through various forms of mass media. Informal learning is by nature flexible in time and space, and does not necessarily match the framework of any learning program. Knowledge is created and constructed from within, motivated by the individual needs of the learner.

Informal learning crosses the borders of traditional educational pedagogical discourses, and is accessible outside the traditional educational domain. In addition, new ICTs, computers, lap-tops and mobile devices are currently delivering learning that is individually adjusted to learners or communities of learners in time, place, and context, and might be used to mediate dialogues and problem-solving sessions in such communities (Traxler, 2009) [32].

Banda [10] argues that learning is based on a mix of different forms of education, moving on a continuum in both directions from formal, via non-formal to informal education. Most educational programs lies somewhere between the two extremes of informal education and formal education.

In regards to the three types of education referred to, Banda ([10], p. 15) further argues they are being viewed as more or less valuable or carrying different forms of value. Formal education is perceived by many people to be the provider of benefits in relation to both informal and non-formal forms of education, since it confers formal credits and therefore, higher status. Therefore, “Some of those rich in informal education but [who] did not go to formal schools consider themselves disadvantaged and unlettered, whereas those doing some non-formal education programs would like to tailor their programs not according to their needs but towards those of formal education” ([10], p. 60). These perceptions have created the impression that the informal and non-formal forms of education should always move towards formal education to legitimize themselves. UNESCO [15] indirectly

supports Banda's argument when they argue that second chance programs can create opportunities for reentry schemes to the formal education structure.

This brief overview illustrates how we perceive the learning processes differently; the competencies one acquires through the different types of education may not be what is being valued, but rather the credits gained through formal schooling and examinations.

As has been illustrated, however, traditional upbringing procedures, where traditions and culture build up one's identity through informal procedures, as well as the new waves of ICTs and mobile learning, have opened up new modes of informal learning processes, not limited in time and space, but for anybody to access provided they have the resources available.

The ideal situation would be for the three forms of education to complement and mutually reinforce one another. Other levels of the formal school system would gain from utilizing principles and methodologies from non-formal as well as informal educational practices. A number of cultural, traditional, practical, and occupational skills embedded in the informal education could be included in formalized learning and enhance and develop the formative and competence-based assessment methods that are commonly used in non-formal and informal learning.

The ways we value the various types of knowledge are reflected in how the nation state prioritizes and develops their education systems. The educational policies and strategies are therefore reflecting how knowledge is being perceived, e.g. their epistemological lenses. The lessons learned and best practices are currently shared between nations in a global network of scholars and policy makers, as well as between non-governmental and governmental institutions. Where and how can we move beyond the existing borders, between various knowledge systems, and across the limitations underlying educational approaches recognized as formal, non-formal and informal education in order to transform the existing educational structures?

4. Educational Transformation and Sustainable Development

4.1. Educational Transformation

According to Fullan [2], this has to start with the educational leaders at all levels. It is also related to legislation, educational management, teacher training and practices, which then ultimately might lead to transformative action. In accordance with UNECA's recommendations, he advocate for awareness-raising campaigns carried out through communicative action, considering a wide range of approaches to reach out beyond the education sector itself. People, parents, local community members, including skilled workers surrounding the school, could all be brought in on an apprenticeship basis to increase and improve the various learning activities to reach out to the diverse needs of the learners. The learning environment could be utilized in different ways; and new actors could be involved in the learning process within, as well as outside, the formal schools.

In other words, opening up for flexible approaches to education innovation, in structures, content, recruitment and organization of education, as well as in the way we include local recourses and actors to contribute to the development of the learning activities at a school and community level, one would create space for the merger of the different epistemologies and ideas from both formal, non-formal and informal learning approaches to be recognized and utilized. In this way, there would be a natural

intersection between the three forms of education, allowing them to complement one another, situated in a local context to ensure relevance and local partnership.

In a diversified society with a diversified group of learners, we need to go outside “the box” and search for new opportunities for qualitative educational processes that can respond to the learners’ needs in a different way than we experience throughout the world today. New partnerships could create new learning opportunities that would open up a new EFA approach beyond 2015.

“When the goal is sustainable change in a knowledge society,” Fullan ([33], p. 17) argues, “Business and education leaders increasingly have more in common”. We are seeing that the fundamental ideas embedded in these strategies have a sound basis in practice across all sectors, Fullan further argues. Like a business leader, educational transformation requires cultural change that is attuned to the big picture, transforming the organization through people and teams. Leaders have to build relationships with diverse people and groups, especially with those who think differently. Cultural change requires attention to sustainability, and the “key components of sustainability are developing the social environment, learning in context, cultivating leaders at many levels, and enhancing the teaching profession” ([32], p. 19). Fullan [33] argues that effective school leaders are key if they are to be effective leaders for sustainable innovation. The state level has to ensure program coherence and support at all the other levels and stages, from the provincial, district and institutional level.

In most instances, educational leadership has focused on literacy and numeracy skills, but to ensure deeper learning, one must encourage problem-solving and innovation skills at all levels. There has to be a national commitment and support that opens up for local diversification and delegation. The government has to assume their responsibility in mobilizing professional leaders that can create a fundamental transformation in the learning cultures of schools [33].

Educational transformation needs a coherent and focused strategy that is reflected in the national strategies, policies, priorities and actions needed to reach the overall objective of any reform or innovation through all three levels, with an emphasis on the school-based activities.

Whatever level you are operating from it requires two things: focus on your own internal development (a school, a district, or whatever) while at the same time seeking connections with other levels, e.g., establish a system of not only greater alignment across the three levels, but even more importantly, more two-way interaction, communication and mutual influence. (Fullan, <http://www.michaelfullan.com/media/13435875600.html>:1) [34].

Directional and sector engagement involves direction from the top combined with partnership with the field (schools and districts). It is explicitly presented as neither top-down nor bottom-up, but rather a *blended* strategy. It involves an inspirational overall vision, a small number of ambitious goals publicly stated as a guiding coalition investment of resources, and a sense of flexibility within the field.

Mezirow’s [35] views coincide with Fullan [33] when arguing for the need to make a comprehensive shift in the global EFA strategy to bridge the gaps identified during the last decades. Mezirow further claims that the educational sector has to get “out of the black box of traditional outcome based assessment of learning”. There is a need to move beyond the epistemological views of instrumental learning. This should be replaced with transformative learning approaches that change problematic, taken-for-granted frames of reference, question sets of fixed assumptions and

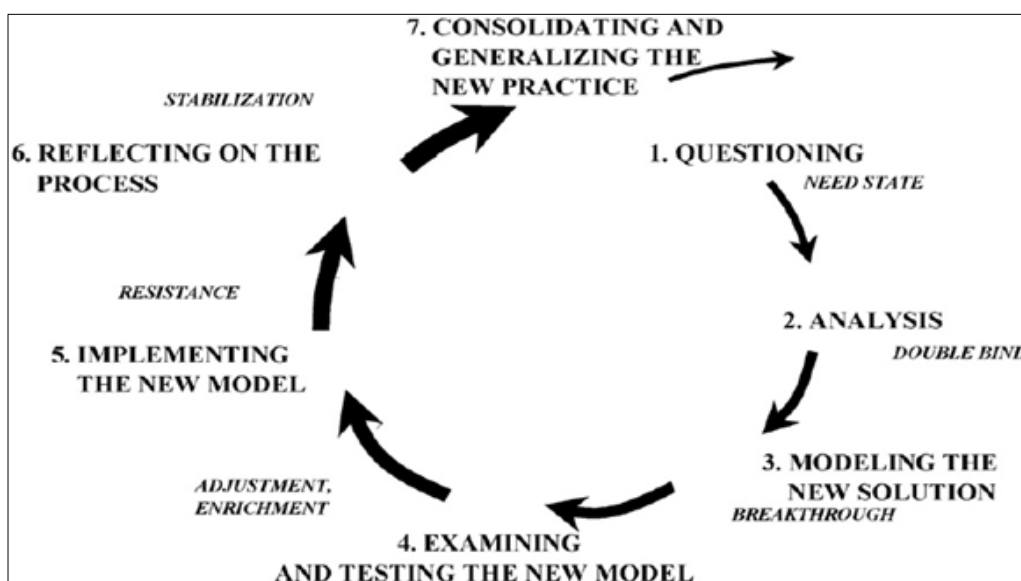
expectations, e.g., worldviews, habits of mind, perspectives, and fixed mindsets, religious doctrines, moral-ethical norms, psychological preferences and schema, paradigms in science and mathematics, frames in linguistics and social sciences, and aesthetic values and standards to make them more inclusive, discriminating, open, reflective, and emotionally able to change (Mezirow, 2003, [35], p. 58). Such frames of reference are more likely to generate beliefs and opinions that will prove truer or more justified in terms of guiding local action and changing practices taken for granted [35].

How can these approaches be turned into innovative educational practice in the years to come? What strategies can be developed to enhance the educational quality, in order to go beyond acquisition of academic knowledge and instead broaden learning to include quality aspects that lead to individual and societal development contextually relevant in space and time?

4.2. Expansive Learning and Educational Transformation

Engeström [4] presents a cyclic way of organizational learning, e.g., expansive learning, where different stakeholders or actors are working together across traditional vertical boundaries. By working across these horizontal borders, and creating space for dialogue and negotiations that is enhancing learning and innovation focusing on action, expansive learning may be turned into educational innovation and transformation. It requires that different institutions, organizations or activity systems collaborate and identify challenges and problems in a given context, whereby the participants through dialogue and negotiations come up with a common vision and transformative action. In other words, the expansive learning cycle illustrates a way of working that applies to Fullan's strategy [2] aiming towards educational transformation. The stages in such an interactive developmental process are illustrated in the following figure.

Figure 1. Sequence of learning actions in an expansive learning cycle (Engeström & Sannino) [36].



The expansive learning cycle can be used as a framework for analyzing the stages used to enhance participation where different actors and institutions work together in order to reach a new approach to teaching and learning in a given context. The framework is here being used to illustrate how the

education sector can work with experts from other environments, public or private, in order to achieve innovative educational practices, as will be illustrated in the case studies in a later section of this paper.

“Expansive learning is an inherently multi-voiced process of debate, negotiations and orchestration” ([36], p. 5). It is also characterized as a non-linear development over a lengthy period of time involving analysis of contradictions and interaction between the various actors to improve the existing theory and practice. This cyclic learning process takes place through interactions and negotiations between different actors in a multiple-level and professional domain, where one of the key elements is facilitation [3], not only in process terms, but also in terms of substance. A continuous process of feeding the participants in the arena with background information and detailed knowledge on a particular topic is necessary to enable a process of co-production of knowledge among the participants.

Expansive learning takes place at the crossroads of education, knowledge management, and innovation. It investigates the links between the individual and the social in vertical and horizontal dimensions of concept formation and knowledge creation [3]. The horizontal sideways dimension of co-learning is strategically mediated through collaboration in a multidimensional partnership where subgroups are faced with questioning and reconfiguration in the cultural context of rules and boundaries between the different actors, organizations, or levels [4] acknowledging the need for sustained horizontal and vertical forms of collaboration in order to meet the overall objectives.

This can be illustrated in the two case studies, by giving examples on how the traditional leaders—the chiefs—were using their position and the traditional structures to support the basic schools in Zambia, as well as how agricultural experts from a department outside the education sector, contributed to improve the strategies developed to sustain agricultural production in Laos PDR.

Expansive learning manifests itself in changes in the object of collective activity, changing the approach to education, through collective participation and negotiations. Engeström [4] would further argue this has to be conducted while at the same time ensure systemic monitoring and evaluation procedures. In successful expansive learning, this might eventually lead to qualitative transformation of all components of the activity systems, in a multidisciplinary and multileveled context [4].

Similar strategies are also reflected by Fullan [34]; it is therefore argued that innovation and educational transformation can emerge and further be enhanced where the actors, at all levels, apply to a more comprehensive and participatory planning process, ensuring a political commitment from the national level, while at the same time, facilitate participatory processes involving relevant stakeholders at the local level.

Horizontal collaboration towards innovation and transformation has its theoretical roots in cultural-historical activity theory (CHAT), which further can illustrate the importance of a broad stakeholder involvement to co-construct new knowledge blending and merging different knowledge systems, Western and Indigenous, and creating local innovation and transformed practice.

4.3. Cultural-historical Activity Theory (CHAT) and Expansive Learning

Cultural-historical activity theory (CHAT) is an interdisciplinary approach to human science. It relates to commonalities in understanding learning processes and locates characteristics in a situated and dynamic view. CHAT is “grasping developmental potentials by initiating and supporting change in

practical work-based activity” according to Avis, 2010, ([37], p. 157). The approach enables us to understand activity-based learning, and is involved in change at the individual as well as the organizational level. The different actors involved and educational initiatives have historically developed quite different, contradictory motives, tools and divisions of labor, according to Ellis [37]. The focus is on challenges and the possibilities for inter-organizational learning, while fostering cultural diversity, in that conflicts and contradiction among multiple systems are viewed as essential in development and learning. It enhances dialogue and negotiations in the development process and eventually results in a common vision and concrete actions by those involved [4]. Expansive learning can here also be seen as the negotiation and reorganization of collaborative relations and practices between and within the activity systems involved. It can be understood as partnerships between actors and institutions working toward a potentially shared objective, e.g., learning.

In this paper, the merger of Western and Indigenous knowledge is considered as a necessity if qualitative education for all can be achieved in the global South, as is supported by Saha and Fägerlind [6], Banda [10] and Breidlid [21]. National education strategies and practices need to reflect the nation states’ cultural fingerprints, reflected in traditions and knowledge systems, situated in the local context where the learning activities actually take place.

The collaborative approach takes the organizational and cultural context as an integral aspect of the phenomena to be explained. Creative meetings between everyday concepts and approaches allow multiple competing ideas to emerge by renegotiating and reorganizing collaborative relations and practices of the activity systems involved [37]. It takes place in a multi-voiced process of debate and negotiations where individual subjects question the existing practice [36].

Political leadership, a systemic and coherent strategy between the various levels, contextualization, and local ownership through multiple actor involvement are also crucial in this context to scale up sustainable and long-term development. Another dimension focused on here is to ensure that the multiple domains, actors, and levels work together, analyzing practices and strategies across the domains, and focusing on innovation and experimentation by learning from each other through participation and interaction.

At the level of higher education, there is growing awareness of the importance of these multiple approaches across levels, domains, and actors. Based on recent findings from the EFA Global Monitoring Report [8], the remaining challenges include the stagnation in literacy levels among adolescents since 2007, in spite of global and national initiatives and efforts to reach EFA and MDGs by 2015. Moreover, it is important to cross the traditional borders between two different educational approaches, conceptualized as formal and non-formal education.

In the following section, the paper will illustrate how expansive learning approaches can lead to transformative changes and create innovation and sustainable change through educational innovation across traditional borders, by briefly referring to and describing two different case studies. One study refers to a formal education program in Zambia; the other draws attention to a non-formal literacy program in Lao PDR.

5. Innovative Learning Approaches.

5.1. Case Studies

This section will highlight some key lessons learned from two different educational initiatives run by the government in close collaboration with other interest groups, e.g., NGOs, local leaders, and the wider community, learners, and parents. These case studies illustrate in brief how we can transform and build up sustainable structures that can help us to scale up all the “good initiatives” and, at the same time, allow for local adaptation, a flexible structure, stakeholder involvement, and relevance.

Both studies show a systemic and coherent strategy involving multiple actors, where learning was facilitated as on-the-job training and carefully monitored and adjusted to meet the needs of the beneficiaries. One study focused on a functional literacy/post-literacy and skills training project in LAO PDR [21]. The second study explores how functional skills and income-generating activities were merged with the national curriculum at the primary level in order to meet the needs of orphans and vulnerable children in one province in Zambia, Carm [38].

5.2. Non-Formal Education Programming

The non-formal literacy and functional skills training program in LAO PDR [21] was evaluated by external educational experts in 2002, with the author as the lead researcher. The project was implemented in three remote provinces with a high proportion of ethnic minorities. The project was aimed at improving the livelihood, particularly of women, to sustaining rural development in the central region of Laos, as a part of the country’s struggle against poverty. The project was initiated by the government of the LAO PDR, funded and facilitated through the support of UNESCO. The project’s main target group, or direct beneficiaries, was young women from the ethnic minorities, between 15 and 35 years with some literacy skills. The post-literacy project was developed to meet the needs of the beneficiaries and applied an approach similar to what was identified by Van’t Rood as success indicators in Section 3.3. The project included a post-literacy approach while at the same time ensuring that the learners were provided with practical, relevant and contextualized learning content.

The project reached out to more than 11,000 direct beneficiaries in a total of 150 villages in the three provinces. Each learner, on average, shared their new knowledge with other family members. The Project Progress Report therefore estimated that the project had approximately 77,000 indirect beneficiaries gaining directly from the project in different ways.

Multiple research methods were applied, focusing on the context in which the project was implemented, the input from the project itself, the processes adhered to during the project, and lastly the product, or the outcome related to the main objectives. Fourteen villages were visited and the team conducted a plenary session, following this up by interviewing 24 direct beneficiaries or learners, 12 village volunteers, 10 employees from the project staff, including facilitators and education administrators from the districts and provinces visited, as well as central level officials.

The management of the project was the government’s responsibility, although funded by UNESCO, and the Deputy Minister of Education was designated as the overall supervisor at the national level. At the provincial level, the Director of Provincial Services of Education was the National Deputy

Director; in addition to financial and monitoring duties, his tasks involved supervising and coordinating the project at the provincial level, including district and local project staff. In this way, the link between the national, provincial, and district level, *i.e.*, the coordination of all educational activities within the project was ensured.

Each provincial center had its own responsibility for the production and delivery of various project components, based on an annual work plan that was jointly developed through participation of each staff member and provincial and national stakeholders, including the local facilitators appointed at the district level. The participants were recruited from the teaching profession or educational administration at this level. At the village level, one volunteer was selected who reported to the district facilitator every second week.

The skills training were organized to fit the seasonal informational needs of the target group, e.g., information on how to grow rice in the dry season should be provided at a time that is suitable for planting the rice. The learning needs of the village beneficiaries informed the basic distance education learning programs, and the multi-channel learning approach combined face-to-face facilitation with information and communication technology, e.g., loudspeakers/radio, cassette players, newspapers, leaflets, and easy readers.

The radio programs were broadcasted on the three different provincial state-owned radio stations, using inputs from villages, specifically stories or interviews. Each program contained three different topics corresponding to the written material. The press section and pedagogical section were responsible for producing the teaching material, in close collaboration with external specialists, e.g., on efficient agriculture techniques, food preservation, health issues, *etc.*, to ensure the relevance and quality of the information disseminated through the learning materials.

The program covered a broad area of improvements, such as regular use of mosquito nets, boiling water, building and using latrines, *etc.* These improvements reduced instances of diarrhea and malaria, the villages were kept cleaner, and children and livestock were removed from the houses. The villagers also reported on the usefulness of the agricultural and livestock information. New techniques for planting and growing vegetables and fruits increased their production and new crops were introduced, e.g., cassava and watermelon, which grew easily in the given climate. Natural fertilizers were introduced, as well as different vaccines for livestock, e.g., chicken and pigs, which increased food production. Some villages also dug their own fishponds and were raising fish for their use and for sale. As a result of the improvements made, they now had a surplus of food, and were able to sell more products. In more than 90% of cases, the participants reported that the overhead was basically used for school supplies and clothes for their children. In all villages, people appeared to have learned and applied new skills regarding food processing and preservation; young women in particular found this very interesting [21].

The village beneficiaries not only gained new knowledge and skills, but were also encouraged to participate more fully in decision making regarding their own lives. Hence, the empowerment and democratization of the beneficiaries were seen as contributing added value to the overall project development goal. The project also created awareness regarding the workload between men and women, which now became a more shared responsibility, including childcare. In addition to the skills improvement, quite a few people endorsed their newly acquired writing and reading skills, and the researchers observed their enthusiasm when there were new deliveries of newspapers, leaflets, and

booklets from the project staff. The project had created a general motivation for learning, which also directly benefited the education of children.

The professional development and capacity building of the project staff itself, including facilitators, volunteers, and politicians at the national level, contributed greatly to the success of the project, from on-the-job training to some individuals being offered master's and PhD degrees by distance, utilizing their own project experience as the basis for their research. In the Lao study, the responses by the various stakeholders clearly indicated that the capacity building and professional development of project staff enhanced professional and social recognition which had a strong, positive impact on their motivation and individual interest in positive outcomes for the project.

The flexibility and responsiveness of the users were again reflected in the methodology and the time and place for delivery of the program components. Broadcasts and loudspeakers were replaced by cassette players if this was found to be more convenient for the users. The cassette player could be brought out in the field, and thus, used while the learners were busy with agricultural work. The newsletters, leaflets, and booklets were shared between direct and indirect beneficiaries; the contents were discussed and reflected on among community members and the concrete application of new knowledge and skills became the final output. Torres [16] argues for the importance of helping community members to organize themselves in order to reach common developmental goals. A community-organized and driven activity has proved to be an important criterion for sustained rural development.

5.3. Functional Skills Training in Basic Education

The project described in this section is based upon experiences gained through an action research approach, where the author was employed as an educational foreign assistant (FTA) working in close collaboration with the core project team. The project was coordinated as a part of the ongoing efforts of Ministry of Education to implement a school-based HIV/AIDS prevention strategy under the senior educational planner at province level, and the project team comprised of a senior education counselor, a head teacher and a representative from the teacher training college. One of the subcomponents of the project specifically referred to here was to support the growing number of orphans in the school. The project targeted all 11 districts in the province, as part of a governmental strategy to combat HIV/AIDS.

A close collaboration between the province, district and school level allowed the program to target schools with a high number of orphans and vulnerable pupils. The numbers of single and double orphans in the schools were alarming, ranging from 20–40%. Their psychosocial and economic conditions were poor, and most of them did not have access to the basic facilities needed for their schooling, e.g., pencils, books, and food. Through participatory processes, facilitated by the core project team, regular meetings were initiated to assess ongoing HIV/AIDS activities and other school-based conditions, initiate and run workshops at the school and community level in order to identify and agree upon possible income-generating activities targeting specifically the needs of the orphans by involving key educational stakeholders from district and school level, as well as NGOs and local chiefs and community members/parents.

Through these meetings, relevant skills were identified that met at least four main purposes of the sub-project. The project should:

- (1). help pupils acquire relevant functional and life skills;
- (2). initiate school-based income generation activities (IGA);
- (3). involve the school and its wider local community and environment in the project development and implementation; and
- (4). support the vulnerable children with basic school materials.

The schools were encouraged to apply for some basic funding to support the initiation process, and based upon the application, strategy, local adaptation and conditions, the schools were admitted to the project.

Several workshops were conducted targeting the principals, senior teachers and local stakeholders, at district and zonal levels. The underlying objectives of the project were shared, along with information about existing educational policies, e.g., a decentralized approach, allowing the schools to identify 20% of the curriculum as locally developed. The project included functional skills training for which the schools could receive a lump sum not exceeding 250,000 Zambian Kwarza (ZKW) (at that time equivalent to about 125 USD) as a startup fund. The functional skills training would be organized as an income-generating activity where all the pupils had certain responsibilities based on age and competencies. This allowed them to take part in running the activity while gaining the skills needed for the different tasks.

After having addressed the issue with the Parent Teacher Association (PTA) members, teachers, chiefs and village head men, and other community members, the ministry granted schools the opportunity to apply for the startup fund. It was a prerequisite that they ensured a broad community participation in the project development and implementation, thereby ensuring participation and local ownership.

Reports from the work-shops, formal and informal interviews with relevant participants, field visits and a close monitoring and evaluation scheme, gave the core project team comprehensive knowledge of the various activities. Due to long distances and many hours in the car to reach out to the sites, the team had the opportunities to engage in on-going dialogues focusing on impacts, challenges and possible outcomes, which contributed to the validity of the findings.

Some key findings from the project reports (2006) are highlighted below, focusing on the management of the project, type of skills training role of pupils by age and utilization of the overhead in three selected urban and rural primary schools [38]. The differences between the activities being initiated reflect the diverse conditions, resources, and local context of the schools. In spite of this diversity, the quality of the initiatives also depended upon the human factors, e.g., the commitment of the school leadership and the management and the way in which programs are run, as well as partnerships and involvement within and outside the school itself.

The activities were carefully monitored through participatory evaluation strategies, but the approach challenged the schools to decide on how they wanted to manage and organize the activities and funds within a certain given framework, including transparent budget procedures. The following matrix briefly sums up some of the activities and division of labor in three selected schools

Figure 2. Overview of outcomes of three school- and community-based income generating activities.

Issues\School	Rural 1	Urban	Rural 2
Management	-Vice principal and Senior teacher and PTA	-Principal and PTA members	-Transparency through a committee: PTA chairperson, the local chief, teachers, pupils, two parents from the community
Skills	-Growing a vegetable garden The leaves, a good relish, are sold to community members, as well as the branches for plant -Branches are also given to -OVCs, as long as we (school committee) are sure they have a place to plant them	-Skills training; they bought 100 chicken beds -They (PTA members) have also formed a gardening committee	-Started with five goats, now 44 -School garden, harvested for feeding. Tomatoes are ready for sale
Pupils' involvement	-Grade 5, 6, and 7 are involved in planting, selling, and making food	Grade 7 students feed the chickens with support from teachers. The budget is organized through a committee, where the counseling teacher is in charge, comprising a mixed group of pupils grades 1–7	-Grades 1 and 2 water and picking them, -Grades 7 and 9 sell them
Community involvement	-Expanding the cassava area as a result of acceptance from the chief to use the land -PTA members created a committee involving teachers to improve transparency and agree on the utilization of money	-The poultry has guards, who are also PTA members, and -The garden close by is also being taken care of by PTA members -A committee has been formed to sell the chickens at the market	-The goats are being taking care of by the pupils, -Supported by community members through the PTA -They (committee) sell them
Surplus	-Supporting OVCs with uniforms and -Exercise books for all children, making all benefit	-No information	-Some of the overhead supports OVCs

From Figure 2 above, we can see the different involvements of PTA members, some contributed by sharing ideas and competence in different ways, some took direct part in the management of the activities and others were actually benefitting from them, receiving cassava plants or buying relish. The rural schools were also supported by the local traditional leaders, the chiefs and head men in different ways. They used their legitimate, traditional authority to mobilize the parents, they frequently followed up the projects through school-visits being engaged in following up the production, and in the case of the rural school 1, the local chief gave out additional land to expand the cassava field. The

pupils did not only participate in the production of crops and develop their numeracy and literacy skills to handle the budgets; they worked together gaining social and communicative skills. The approach allowed for a diversified solution within a provincial and district strategy, enhancing local relevance in a decentralized approach to learning and local school and community development.

5.4. Brief summary of the case studies

The two case studies show how one can apply the cycle of expansive learning in different ways, ensure a broad participation in the development of localized initiatives, in formal as well as non-formal learning activities. The functional skills acquired attracted the beneficiaries and enabled them to improve their livelihood as well as contributing to economic and socio-cultural development through collaboration, sharing of experiences and competencies. Representatives from the beneficiaries, being pupils or adolescents, were engaged in the project development, which also included a multiple group of actors, employed directly in the projects, or support staff with a specific competence needed to contribute to the quality of the various activities. Through collaboration across traditional borders, local educational initiatives were developed based upon the context of the schools and communities, which also ensured a relevant and diversified approach at the local level, implemented and managed in different ways.

The projects were rooted in national policies and strategies, and had a decentralized and participatory approach to planning and implementation; Western and Indigenous knowledge was merged at the implementation level and ensured relevance and ownership. The establishment of a supervisory support system, participatory monitoring and evaluation procedures ensured a continuous capacity building of those involved in the different projects.

The non-formal post-literacy program had the characteristics of a flexible non-formal learning approach, but through its character and design, it attracted learners outside the program, so-called “indirect beneficiaries”, and had a direct impact on the learners and their children’s motivation for further schooling. Additionally, the functional skills developed had a direct impact on the learners and their families, and also creating a sustained livelihood for the communities as a whole.

6. The Way Forward

Findings referred to in the Global Monitoring Report [15] clearly show that there is still a long way to go before everybody has access to qualitative universal education. However, the report also gives examples from innovative initiatives, the so-called second chance programs that demonstrate the importance of close interaction and involvement of different actors in order to create learning environments responsive to the needs of the learner. The case studies above illustrate how governmental bodies can also move beyond an education sector approach where the focus is on measurable quantitative outcomes. The case studies further show how the enacted policies, modified or unmodified, as they were being translated into actions through systemic, programmatic and project level changes, led to transformations in educational delivery and contributed to poverty alleviation and a better livelihood for the communities involved [22,38].

Bringing local knowledge and innovative learning approaches to the formal schools gave schools the chance to include the parents and community members in regular and on-going educational activities targeting their children.

By focusing on the characteristics of the three types of education—formal, non-formal and informal—this paper shows how Engeström’s third generation of CHAT and expansive learning [3,4,36] can be applied as a tool to broaden the understanding of how strategic facilitation across multi-domains, professions and levels through its multi-voiced character, rules, and artifacts can be organized. Participatory processes can create the basis for this type of merger, which is situated in a given context. Sustainable development and change have proven to depend on local commitment, local involvement, and the use of multiple knowledge systems, specifically indigenous knowledge (IKS) and Western knowledge (WKS). Evidence from research conducted in Lao PDR [22] and Zambia [38] shows how systemic and inclusive strategies and methodologies can create spaces for horizontal dialogue and interaction across traditional boundaries, enhance reflective thinking, and equip stakeholders with tools to mediate processes that allow local innovation, educational development and sustainable change.

The educational discourses beyond EFA should not be left with “more of the same”. The global educational society now has the opportunity of taking a new direction that leads to educational transformation [2,33,34] and moves outside the “box” of traditional formal schooling, creating space for innovative education for all, aiming at sustainable development at individual and societal level.

Transformation and learning is based on multiple domains, actors, and levels working together, analyzing practices and strategies across the domains, and focusing on innovation and experimentation by learning from each other through participation and interaction. Transition management is based on a cyclic way of thinking, a wheel of transition organized in four activity clusters starting with problem assessment (to establish further development of the transition arena) and following through to developing sustainability (visions and transition agendas), mobilizing actors (executing projects and experiments), and lastly, evaluation (monitoring and learning) [36].

A blended strategy for educational transformation, as argued by Fullan [2], opens the doors towards more radical educational reforms. It therefore points to the need for more purposeful experiments that attempt to go wider as well as deeper when discussing new education strategies beyond 2015. There is a greater need for educational reforms that result in individual as well as societal benefits, building upon recourses available within and outside the existing educational structure, accounting for local diversities and needs.

In other words, for this to happen, it is crucial to build an effective institutional framework at different levels, e.g., “national, regional and global levels and mobilize financial resources through the development of concrete action plans using the whole array of funding opportunities for its implementation” ([27], p. 22), as well as to mobilize and actively involve the private sector, NGOs, and other civil society organizations (CSOs) in strengthening advocacy and investments.

Acknowledgements

The LAO PDR case study reported on in this paper was commissioned by UNESCO; the Zambian study was a result of a formative research approach to identify changes and innovation in a larger educational development project funded by Ministry of Education in Zambia.

Conflict of Interest

The author declares no conflicts of interest.

References and Notes

1. Coombs, P.H.; Ahmed, M. *Attacking Rural Poverty: How Non-Formal Education Can Help*; Johns Hopkins University Press: Baltimore, MD, USA, 1974.
2. Fullan, M. Education for continuous improvement. Available online: <http://www.michaelfullan.ca/media/13435880190.html> (accessed on 11 November 2012).
3. Engeström, Y. *Perspectives on Activity Theory*; Cambridge University Press: Cambridge, UK, 1999.
4. Engeström, Y. *From Teams to Knots: Activity Theoretical Studies of Collaboration and Learning at Work*; Cambridge University Press: Cambridge, UK, 2008.
5. Sharples, M.; Taylo, J.; Vavoula, G. A Theory of Learning for the Mobile Age. In *the Sage Handbook of Elearning Research*; Andrews, R., Haythornthwaite, C., Eds.; SAGE Publications: London, UK, 2007.
6. Fägerlind, I.; Saha, L.S. *Education and National Development, Butterworth Heinemann*; Oxford University Press: London, UK, 1989.
7. McGrath, S. The role of education in development: An educationalist's response to so recent work in development economics, 2010. Available online: http://eprints.nottingham.ac.uk/1691/1/The_role_of_education_in_development.pdf (accessed on 12 March 2013).
8. Freire, P. *Pedagogy of the Oppressed*; Continuum: New York, NY, USA, 1979.
9. Doyle, C.S. *Outcome measures for information literacy within the national education goals of 1990*; Final report to national forum on information literacy; Summary of findings. Available online: <http://www.eric.ed.gov/PDFS/ED351033.pdf> (accessed on 20 July 2012).
10. Banda, D. Education for All (EFA) and "African indigenous knowledge systems (AIKS)": The case of the Chewa people of Zambia. Available online: http://theses.nottingham.ac.uk/525/1/Final_Thesis_munirs_After_submission.pdf (accessed on 20 August 2010).
11. Save the Children. Ending the Hidden Exclusion. Learning and equity in education post-2015. Available online: http://www.savethechildren.net/sites/default/files/libraries/Ending_the_hidden_exclusion_full_report.pdf (accessed on 20 February 2013).
12. Odora-Hoppers, C.A. Indigenous Forms of Learning in Africa with Special Reference to the Acholi of Uganda. In *Indigenous Forms of Learning in Africa Report*; Brock-Utne, B., Ed.; Oslo Institute of Education Research: Oslo, Norway, 1994.
13. Coppens, S. Re-introducing life-skills education and value clarification in the learning environment: The role of learner- and value-centered methodologies in the prevention of conflict and violence in school and out-of-school learning environment. Available online: http://scholar.googleusercontent.com/scholar?q=cache:aaj3IpYAFCYJ:scholar.google.com/+Coppens+Sven&hl=en&as_sdt=0,5 (accessed on 11 November 2012).

14. Chinapah, V. Education of Quality for All—Myth or Reality! In *Millennium Goals Revisited: A Common Wealth of Learning*; Macbeth, J., Ed.; Cambridge University: London, UK, 2012; pp. 180–191.
15. UNESCO. *EFA Global Monitoring Report*; UNESCO: Paris, France, 2012.
16. Torres, R.M. *Lifelong Learning: Where and How Does Adult Basic Education Fit? A New Momentum and New Opportunity for Developing Countries*; A study commissioned by SIDA, draft version; SIDA: Stockholm, Sweden, 2001.
17. Torres, R.M. From literacy to lifelong learning: trends, issues and challenges in youth and adult education in Latin America and the Caribbean: regional synthesis report. Available online: <http://unesdoc.unesco.org/images/0018/001829/182928e.pdf> (accessed on 21 November 2012).
18. Little, A.W. Motivating learning and the development of human capital. 2002. Available online: <http://angelawlittle.net/wp/content/uploads/2012/07/MotivatingLearningDevelopmentHumanCapital2002.pdf> (accessed on 11 November 2012).
19. Kanjee, A.; Sayed, Y.; Rodriguez, D. Curriculum planning and reform in sub-Saharan Africa. *SARE* **2010**, *16*, 83–96.
20. Chinapah, V.; Cars, M. Global Efforts towards Education of Quality for All—Critical Examination of the Process. In *Qualities of Education in a Globalized World*, Forthcoming; Sense Publishers: Boston, MA, USA, 2013; Volume 5.
21. Breidlid, A. *Education, Indigenous Knowledges, and Development in the Global South. Contesting Knowledges for a Sustainable Future*; Routledge: New York, NY, USA, 2013.
22. Carm, E.; Smith, B. Education and its Impact on Poverty: An Initial Exploration of the Evidence. Available online: http://scholar.google.no/scholar?q=adult+basic+education+and+learning%2C+carm&btnG=&hl=en&as_sdt=0%2C5/ (accessed on 14 March 2013).
23. Carm, E.; Øgrim, L. M-learning-a Potential for Women’s Empowerment? *World Stud. Educ.* **2013**, *14*, 57–77.
24. UNESCO. United Nations Decade of Education for Sustainable Development (2005–2014). International Implementation Scheme. Available online: <http://unesdoc.unesco.org/images/0014/001486/148654E.pdf> (accessed on 17 November 2012).
25. Kvale, S.; Brinkmann, S. *InterViews: Learning the Craft of Qualitative Research Interviewing*; Sage: Thousand Oaks, CA, USA, 2008.
26. Serpell, R. *The Significance of Schooling. Life-journeys in an African Society*; Cambridge University Press: Cambridge, UK, 1993.
27. UNECA. Sustainable development report on Africa sustainable consumption and production for sustainable growth and poverty reduction. Available online: <http://new.uneca.org/Portals/sdra/sdra3/SDRA3.pdf> (accessed on 10 October 2012).
28. United Nations Economic Commission for Europe. Strategy for Education for Sustainable Development: Learning For the Future. Competences in Education for Sustainable Development. Available online: <http://new.uneca.org/Portals/sdra/sdra3/SDRA3.pdf> (accessed on 20 September 2013).
29. Kelly, M. *The origins and Development of Education in Zambia from Pre-colonial Times to 1996*; Image Publishing House: Lusaka, Zambia, 1999.
30. Coombs, P.H.; Ahmed, M. *Attacking Rural Poverty: How Non-formal Education Can Help*; Johns Hopkins University Press: Baltimore, MD, USA, 1974.

31. Van't Rood, R.A. Empowerment Triangle. Available online: <http://www.vantrood.nl/nieuw4.htm> (accessed on 9 September 2012).
32. Traxler, J. Current State of Mobile Learning. In *Mobile Learning. Transforming the Delivery of Education and Training*; Ally, M., Ed.; AU Press: Edmonton, Canada, 2009.
33. Fullan, M. The change leader. Available online: http://pil.numplus.com/SchoolLeadership/04-fullan/Articles/2002/05_02.pdf (accessed on 19 September 2012).
34. Fullan, M. Introduction to challenge of Change: Purposeful Action at Work. Available online: <http://www.michaelfullan.com/media/13435875600.html:1> (accessed on 29 September 2012).
35. Mezirow, J. Transformative learning as discourse. *J. Transform. Edu.* **2003**, *1*, 58–63.
36. Engeström, Y.; Sannino, A. Studies of expansive learning: Foundations, findings and future challenges. *Edu. Res. Rev.* **2010**, *5*, 1–24.
37. Avis, J. Transformation or transformism: Engeström's version of activity theory. *Educ. Rev.* **2010**, *61*, 151–165.
38. Carm, E. The role of local leaders in cultural transformation and development. *Compare* **2012**, *42*, 795–816.

© 2013 by the authors; licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).