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**Presentations  
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Thematic synthesis report on sub-theme 1

**Towards 9-10 years of Education For All:  
Promising Practices and Strategies**

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**Working Document  
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# Towards 9-10 years of education for all: promising practices and strategies

Synthesis from the papers submitted by country teams, Consultants, NGOs and international agencies

## 1.1 Section 1: Introduction

- 1) **Objective and audience.** This technical overview paper for theme 1 aims to provide a brief presentation of key issues underlying Africa's transition to 9-10 years of basic education for all. It also highlights selected best practices (as presented in the country case studies) and key issues raised in studies submitted by NGOs and international development partners commissioned under Theme 1 for the 2008 ADEA Biennale. The intended audiences for this overview are the participants in the ADEA biennale 2008 (education ministers, senior technical decision-makers, and development partners).
- 2) **Adoption of the Millennium Development Goals (MDGs) and the prioritization of universal primary education** have led to a rapid increase in primary enrolments in many African countries.<sup>1</sup> This along with high population growth has resulted in increasing demand for access to post-primary education and competition for public resources. The designation of the expansion of universal basic education to 9 to 10 years as a theme of the 2008 ADEA Biennale reflects a growing consensus among African countries and the international community that completion of primary education is insufficient to ensure the creation of a competitive labor force, equipped with the skills and knowledge requisite for economic growth in the 21<sup>st</sup> Century.
- 3) **Structure of the paper.** The theme 1 overview paper begins with an introduction to provide the objectives, methodology and background for the studies submitted under theme 1. It also explains the context of lower or junior secondary education (common definitions and overall comparative key aspects) for the benefit of the participants of ADEA's biennale 2008. Section 2 presents selected key issues related to theme 1 for the transition from primary education for all to a more inclusive and efficient basic education which would include the lower / junior secondary education cycle. Section 3 provides a quick overview of best practices and lessons on "what works" mainly from the submitted country studies. It also draws from the international development partner studies where relevant. However, the focus remains on what the country teams reported from their perspective in Africa. Section 3 places theme 1 issues from section 2 into a broader context of social and economic perspectives in the region. Section 4 offers recommendations on setting realistic and achievable goals for extending universal basic education in Africa to include the junior secondary cycle. Section 5 offers some suggestions for the way forward. Table 1 in the annex provides a summary of data from the country studies. Table 2 provides a summary of policy options for secondary education reform.

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<sup>1</sup> Primary enrolments in Sub-Saharan Africa increased 27 % between 1999 and 2004. SEIA Synthesis Report, p. 31. Verspoor and SEIA Team (2008).

### **Background: the realities and challenges for expanding into basic education for all**

4) African education experts and politicians look with concern at high youth unemployment rates, want to deliver graduates with competitive skills and knowledge, and lighten the constraints of public financing resources. To provide better delivery they are also moving toward decentralizing management and services and are planning to overhaul junior and senior secondary curricula and assessment mechanisms. The multiple problems facing African junior and senior secondary education (which have both very different structures and objectives) can not be seen in isolation. Increased access and better quality graduates require a balanced approach to building education systems. For many African countries facing a growing demand for basic education<sup>2</sup> the support of international donor agencies is crucial. However, donor agencies have varying objectives for providing their assistance.

5) There is a growing consensus that “Economic growth requires a well-qualified labor force. Further learning opportunities for primary education graduates should be within reach for all.” However, in Africa there is a large contingent of youth who have never had access to schooling or have dropped out for a variety of reasons. Equity considerations require education stakeholders to also provide equal opportunities for “out-of-school” youth who are mostly unemployed and from the poorest quintiles. On economic and social grounds there is ample reason for expanding learning opportunities after primary school<sup>3</sup>. This is demonstrated by new basic and secondary education reform policies in many African countries (for example in Burkina Faso, Botswana, the Gambia, Kenya, Madagascar, Mauretania, Mozambique, Namibia, Senegal, Tanzania, South Africa, Uganda, and Zimbabwe.) Most reform policies need further international support to work out sustainability, governance, and quality aspects. There is no doubt that Africa can only compete on an equal platform with other regions if all African children complete a cycle of good quality basic education and if the majority of its youth have better opportunities for further learning. Expansion of education services and economic growth in Africa can only be realized concurrently, since these are intrinsically linked. It is therefore important to emphasize the need for high quality and relevancy of knowledge and skills that are transferred by formal primary and (junior) secondary education. How to do that will require more debate among African and international educators and stakeholders and moving away from the exclusive focus on “selection for entry into academic higher education”? Selection versus certification in basic and secondary education is the African dilemma. So, which changes can and should be made?

6) This brings the question: “How good is the comparative quality and relevance of African primary and basic education? And how does it compare to international quality trends (for example the international assessment tests: TIMSS and the OECD’s PISA)?” African socio-economic stakeholders (public and private sectors) have the right to insist on accountability, efficiency and demand-driven quality. Sub-Saharan countries which participated in the TIMSS and PISA exercises over the past years were not really happy with the results. Nevertheless, participating in these mechanisms is useful and can provide excellent opportunities to improve teaching and learning by implementing best practices shared by countries which have better results.

7) Primary and secondary education enrolment and completion rates vary widely in Africa. Some countries have high net enrolment rates in junior secondary in the range of 75-95 percent (Botswana, Cape Verde, Mauritius, Namibia, Seychelles and South Africa). Others still have low junior secondary enrolment rates (for example Chad, Burundi, Burkina Faso, Central African Republic, Congo Democratic Republic, Ethiopia, Mali, and Niger). Net enrolment and completion rates at the senior secondary level are also comparatively low in most Sub-Saharan countries, and vary significantly. In much of Africa this has led to a significant growth of private secondary schooling and other private “further learning” opportunities.

8) In social terms, there are huge pay-offs for better access to and quality of (junior) secondary education. Citizens who have completed “basic education” have less children, lead healthier lifestyles, get

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<sup>2</sup> Basic education in this paper is about 6 years of primary and 3 years of (junior) secondary education.

<sup>3</sup> See “Strategies for sustainable financing of secondary education in Sub-Saharan Africa”; Keith M. Lewin, University of Sussex, UK; SEIA thematic study, AFTHD, World Bank (2008).

their own children to school, and are better able to contribute to the economic development of their countries. A completed basic education also can reduce the spread of HIV-AIDS and other (sexual) diseases. Many of these gains cannot be achieved with only primary education (of often weak quality). And African countries face the pressure of a growing number of primary education graduates with higher expectations for further learning and insufficient opportunities.

9) Public expenditures for secondary education vary widely also (Lewin, 2008). In countries that make significant progress in achieving primary EFA, the public education budget will inevitably have to address the current imbalances of resource allocation (which favors in many cases primary and tertiary education tiers). In summary, African countries have widely varying education performance indicators, but they all face the growing demand for more and better education from an increasingly restive youthful population. The challenge is to concurrently increase access, improve quality and provide equity.

10) Given the rapid technology changes and the emerging knowledge economies (ICT, new technological fields of study and their related new job profiles) African countries will need to get a fast transformation underway in their secondary education and training systems. Such a transformation should include adopting new science and technology subject content, training teachers to work with new technologies, upscaling and improving the professional support systems for secondary teachers, modernizing the secondary curricula, and providing better learning materials and infrastructure, in both urban and rural settings. This will inevitably require more cost-efficient service delivery to teachers, students and schools.

### **Structures defining junior and senior secondary education**

11) Worldwide trends show that junior (or lower) secondary education (JSE) is usually part of a high-quality “basic4 education cycle” for all, while senior (or upper) secondary education (SSE) offers diversified pathways for further learning and entry into the world-of-work. In general, secondary education is divided into a junior and senior cycle, each focused on different age groups, and having vastly different pedagogic goals. Junior, secondary education provides schooling for the age group of roughly 12-15 years, covering in most countries grades 7 through 9. Senior secondary education provides education for the age group of roughly 16-19 years, covering in most countries grades 10 through 12 or 13. Most secondary education, especially at the senior secondary level, includes technical and vocational education and training. In senior secondary cycles students can select in most cases different streams, where specific subjects allow a focus on specific job areas, such as sciences and technology, economics and languages, mathematics and sciences.

12) Patterns of secondary education structures in Africa mostly still reflect the traditional structures inherited from England or France. However, there are exceptions. Kenya has an 8 year primary cycle followed by 4 years of secondary. Madagascar is in the process of restructuring its primary cycle from 5 to 7 years, and its junior secondary cycle from 4 to three years. By the end of the 1990s the most common structures were: 6+3+3 or 6+4+3. However, in Mauritius, and some other (mostly Anglophone) African countries, the structure follows the traditional 6+5+2. This includes 5 years of O-level (lower secondary) followed by 2 years of so-called 6th Form College (senior / upper secondary).

13) Middle and higher income countries (OECD, Asia, Latin America) generally include their junior secondary cycle as part of a “seamless” basic education cycle of 9 or 10 years. Generally there is a compulsory basic education cycle for the 5 - 15 year age group. At 16 years most students do continue their education, but this is not compulsory. Consequently there are various mechanisms by which students (and their guardians) contribute to the costs of further education. In practice all governments continue to significantly subsidize secondary and tertiary education, in both public and private establishments.

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<sup>4</sup> We use the OECD’s definition of basic education: about 9 years of completed schooling with a graduate profile that follows international quality trends and satisfies the need for local knowledge and relevance. In most middle and higher income countries compulsory (and “free”) education covers the group of 5-16 years of age.

14) The key competencies defined as the learning targets for the basic education age group are considered the basic tools necessary to function in society. In many African countries, junior secondary is now also being included as the last stage of basic education and several governments have announced “free” universal basic education policies. Some have started to formulate similar policies for secondary education (Southern African countries, Nigeria, Uganda, Kenya). Basic education includes both a transition from primary to junior and to senior secondary or the labor market, as well as a time of transition from childhood to adolescence.

15) Both junior and senior secondary cycles in Africa are used as the main selection mechanism to regulate entry into higher education. This raises “efficiency questions”. Students who do not complete the secondary cycles in which they start represent a significant costs for governments. The “selection-driven” system came from anglo- and francophone traditional education structures which were inherited. Thus the African secondary school has always been a “selection arena” for university education access. This created inequity<sup>5</sup>, and denied many African youngsters, quite capable of satisfying secondary school standards, a certificate of secondary education completion. The “selection versus certification” battle is still ongoing and needs to be resolved before significant expansion of access can be achieved. Moving toward a system that provides more students with key competencies for the labor market rather than only selecting for academic learning needs to be reexamined by African countries. In most OECD countries secondary education is defined by graduate profiles and attainment targets per cycle within a framework of key competencies<sup>6</sup>.

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<sup>5</sup> For example, adolescents from the richest 20% of population in Africa are 6 times more likely to be in Grade 9 than those from the poorest 40% (Keith Lewin, SEIA, 2006).

<sup>6</sup> European Union and OECD documents on key competencies. World Bank country reports.

## 1.2 Section 2: Towards 9-10 Years of Education For All: Promising Policies and Strategies<sup>7</sup> (summary of selected key issues related to theme 1)

16) Experiences from the African countries and their current education markets (largely urban, but demand from the rural areas is significant and growing also) confirm that the majority of Africa's youth want to benefit from opportunities for further learning. Inequity in access and in quality of secondary education, notably in the junior secondary in most African countries is significant. As a result private secondary school initiatives are growing (as is demonstrated by countries such as Nigeria, Kenya, Uganda, and Tanzania). There also seems to be a proliferation of non-formal learning mechanisms, provided by private entrepreneurs and organizations. These developments provide challenges and opportunities for governments. Challenges are to ensure acceptable quality of teaching and learning and to give justifiable recognition to qualifications from these institutions. Often the students (and their families) attending these secondary (in)formal schools make great personal sacrifices to improve their competencies and knowledge levels and thus get a better shot at the job market.

17) Many issues and challenges are addressed in the papers submitted by the development partners and NGOs. Standing out among these is the need to for more relevant data analysis and improved monitoring of both quality and efficiency at basic and secondary education levels. One related element that could bring significant benefits to African countries would be to participate in international assessment exercises, even as countries are in the process of reforming their primary and junior secondary systems. Also, governments could seize the potential opportunities that are brought by the increasing number of private education providers. Finally, another important improvement is to provide positive incentives for primary and secondary teachers, and to make effective teacher management the "cornerstone" of the basic and secondary education strategy. Teachers are an asset, but they have to deliver their services in a satisfactory fashion. This requires a balance between fair compensation for work and results delivered, and offering remunerations that are in line with economic "affordability".

### **Transition from initial education to working life**

The issue of transition from initial education to working life has been a long standing policy priority among OECD Members. The transition from initial education to work is a key stage in laying the basis for continuing progression in learning and work throughout adult life. Some of the features which contribute to successful transitions are:

Clearly defined, well organized, open and coherent learning pathways and qualification frameworks designed and developed in a lifelong learning process;

Attractive and accessible information, guidance, and follow-up services for all young people integrating educational, labor market, and social counseling;

Institutional frameworks for the organized and continuous involvement of and co-operation among all the relevant players at the national, sectoral, and local levels in order to achieve policy coherence and effective program implementation.

Source: OECD. 2005. Initial Education to Working Life (Paris).

18) Private schools in middle- and higher income OECD countries are regularly inspected and generally participate in the monitoring and assessment exercises implemented by their governments. In Africa the

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<sup>7</sup> The overview of key issues draws primarily upon the findings of the country case studies and background papers commissioned under theme 1 for the 2008 ADEA Biennale. It also draws upon relevant research of development partners. The SEIA study program of the Africa Human Development Department of the World Bank provides access to all SEIA studies at [www.worldbank/afr/seia](http://www.worldbank/afr/seia). The SEIA multiyear study was conceived by the Africa Human Development Department of the World Bank and launched in 2002 with a UNESCO/BREDA-World Bank workshop in Mauritius. SEIA aims to support African countries in the development of sustainable strategies for the expansion of access and improvement of quality and relevance of leaning and teaching at the secondary level.

private providers are growing rapidly. African governments still need to catch on to the positive effect and the potential benefits that a fair and balanced incentive system for private providers can bring. This can be done through tax incentives and special targeted subsidies. Of course there needs to be accountability and “good administration” in return. This implies that private providers are satisfying minimum quality, safety and teacher-qualifications standards as determined by the appropriate authorities. Asian countries have demonstrated that private providers can be a significant factor in expanding access (in fact at the post-basic level they are the main / majority force). The potential of Public-Private Partnerships with appropriate regulatory operating guidelines can significantly add to the impetus for expansion of access at the secondary level and give African youth more chance to benefit from “further learning” (both for those who have successfully completed a cycle and those who dropped out and need an extra chance).

### **Cost efficiency and financing challenges for expansion into basic education.**

19) High costs and limited resources pose daunting financial challenges<sup>8</sup> for the expansion of basic education. Most African countries will not be able to afford substantially expanded basic education for all without a combination of increased financing allocations to post-primary education and the implementation of cost-saving reforms that reduce cost per pupil and increase efficiency. The length of primary and secondary cycles varies widely across the region creating different financial challenges for expansion.

20) In most African countries senior secondary education is generally not diversified, and less focused on the majority of students who will enter the labor market after completing the junior and/or senior secondary cycles. These trends also appear to be influenced increasingly by private secondary schooling providers. In some systems, technical and vocational institutions are separate from general secondary schools; in others they are more integrated. All these trends (and the traditional nature of secondary education as an academic selection track) have an effect on the financing structures for education in Africa. Explanations for the high costs and limited resources available for the expansion of basic education vary by country. It is commonly the case, however, that public resources allocated to secondary education cycles are more limited than public financing resources to primary and higher education. In countries where substantial amounts of the education budget are committed to universalizing primary education, the difference in allocations between primary and secondary education even larger.

21) The constraints of public financing for basic and secondary education in Africa are further compounded by their relatively high unit costs. This is caused by inefficient use of (public) resources (related to teacher management, the multitude of subjects taught in junior and senior secondary public schools, use and management of infrastructure, and the inefficiencies in governance). Teacher salaries in many African countries are relatively higher as a multiple of GDP per capita than in (for example) OECD countries<sup>9</sup>. A secondary education system which has significant inefficiencies and does not deliver the desired quality of graduates to the economy should fix these problems first before expanding (or at least provide a clear strategy how to fix these problems while expanding). This case is clearly demonstrated by the lessons from Asia. Some countries are trying to create different classes of salaried teachers (for example contract teachers in Madagascar and Senegal). However, this solution brings its own problems.

### **Expansion of access demands and increasing primary completion rates drive the need for reform at junior and senior secondary level**

22) In Africa around 60-65 percent of the primary school age group completes primary education, which is still relatively low compared to Asia and primary completion rates in the OECD countries. Variations

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<sup>8</sup> Lewin, K. A., Caillods, F. (2001). See also the paper by Keith Lewin “Seeking secondary schooling in Sub-Saharan Africa: strategies for financing”; SEIA thematic study, World Bank (2007). And the paper by Alain Mingat (AFD) “La soutenabilité financière comme référence pour le développement de l’éducation post-primaire dans les pays d’Afrique subsaharienne. » (AFD, 2008).

<sup>9</sup> In OECD countries teacher salaries are on average 1-2 times GDP/capita. In many African countries teacher salaries are between 3-8 times GDP/capita. This inhibits expansion of services (economically not affordable)

between individual countries are still significant. In addition, the question of the “international competitive quality” of Africa’s primary graduates should be better monitored. There are of course convincing arguments for the continued prioritization of achieving universal primary education. Through a “screening process” the majority of these primary graduates enter the junior secondary cycle. On average about 30 percent of the age group completes 3-4 years of junior secondary. Even fewer of the relative age group completes senior secondary schooling. The enrolment and completion rates of girls are in many cases lower than for boys, even though in some African countries there is a growing concern for the dropout rates of boys.

23) In the end only one in four or five African youth complete secondary education, falling short of the demands for economic growth and social development. If all primary-school leavers were to enroll in lower-secondary school, the number of places at this level would need to increase by a factor of four to seven.<sup>10</sup> Secondary-school systems in Sub-Saharan Africa cannot absorb such large increases without reform and new patterns of financing. The supply of teachers for primary and (junior) secondary schools in Africa poses an additional challenge. For example Ghana would need to triple its primary teachers output to achieve universal primary completion at its current pupil/teacher ratio. In many countries the demand for (junior) secondary education is forcing double shifts (and in urban areas in some countries there are also double shifts in primary schools). This adds to the teacher supply challenge.

### **Ensuring an expansion of access for basic education that is equitable**

24) Participation in junior secondary education in Africa is biased against the poor, females, and youths living in rural areas<sup>11</sup>. Gender disparities at the junior secondary level are particularly high in Benin, Cote d’Ivoire, Ethiopia, Guinea, Mali and Togo where fewer than 40% of the new entrants are girls.<sup>12</sup> However, reasons for gender disparities in enrolment vary; in some cases gender disparities at the junior secondary level are caused by gender disparities in primary education. In other cases, inequity in access to junior secondary education mainly reflect disparities in the transition rate for boys and girls between the last year of primary school and the first year of junior secondary.

25) Even more so than gender, poverty and rural residence are strongly associated with low enrollment in secondary education. Relatively few poor children reach the last grade of primary and few of those that do, manage the transition successfully.<sup>13</sup> A significant factor is the opportunity costs to families and parents. To go to (junior) secondary school families must still make significant investments over a number of years. For the poorest families this is often a burden that is weighed against other priorities. If, in addition, the perception of the beneficiaries is that quality (and thus the benefits later in life) is not sufficient, the chance for poorest students to drop out increases. Solutions can come from strategies that improve the quality and relevance of the junior and senior secondary curricula, improved support for teachers, and modern learning and teaching materials (text books, ICT access, data information sources, improved communication between teachers), and taking better care of the needs of disadvantaged groups (girls and the poorest students).<sup>14</sup>

### **Quality and relevance of junior and senior secondary curricula, learning and assessments.**

26) The quality of education is linked to the skills and knowledge that are transferred to the students and the value of their diploma / certification on the (local) labor market. This of course depends on the structure

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<sup>10</sup> Glassman, D., Hoppers, W. and De Stefano, J. (2007)

<sup>11</sup> Françoise Caillods: “Neuf années d’éducation de base pour tous: les défis de l’accès et de l’équité en Afrique”; (2008)

<sup>12</sup> Diop, M. et al. (2008). “Gender Issues in Post-Primary Education”. Background paper for the 2008 ADEA Biennale. See also, “Transition to Post-Primary Education with a Special Focus on Girls: Medium-Term Strategies for Developing Post-Primary Education in Eastern and Southern Africa.” UNICEF (2008) and SELA Thematic Study on “Gender Equity in Junior and Senior Secondary Education in Sub-Saharan Africa.” World Bank (2008).

<sup>13</sup> Glassman D., Hoppers and DeStefano (2007),

<sup>14</sup> Caillods, F. (2008)

and content of the primary and junior secondary (basic) curricula, the effectiveness of assessment, and the competence / qualifications of teachers. The supply of qualified teachers is constrained by the output capacity of teacher education systems. Teacher shortages are exacerbated by the fact that many are not career teachers and deployment policies are insufficient to meet the demand.<sup>15</sup> The quality and relevance of teaching and learning at the junior secondary level is also significantly influenced by the effectiveness of the curriculum at the primary level. If the entry level of students into the junior secondary cycle is not satisfactory (as determined by the primary graduate profile and the curriculum) teachers at the junior secondary level end up teaching what should have been taught at primary. This re-enforces internal inefficiency in the system. The link between the two curricula and an effective communication between schools and teachers in primary and secondary are essential for improving completion rates within the junior secondary cycle.

27) Secondary education in Sub-Saharan Africa is dominated by prescribed syllabi and examinations<sup>16</sup>. Students spend a lot of time on examinations (between trimesters or semesters, at the end of each year, and at the end of the junior and senior cycles). The outcomes (quality , relevance) of teaching and learning is measured by the exams, and it is no surprise that many teachers “teach for the exam”, without being able to go into the larger context of learning associated with high standards of learning in the 21st century. The result is that teachers train students to reproduce facts and definitions, leading to rote-learning. Analysis of junior secondary examination results in the country cases from the SEIA thematic studies show that students generally pass in the lower categories and that achievement in the higher cognitive domain is considered problematic. However, it is generally acknowledged that more needs to be done on systematic data collection and analysis of learning and teaching outcomes. This is complex and (if not set-up properly) expensive. TIMMS 2003 study (measuring mathematics and science abilities in Grade 8, first grade of junior secondary) in which Botswana, South Africa and Ghana participated, produced disappointing results. But international comparison is just one facet. More important is the opportunity to improve the system by participating in these international assessment exercises. Asian countries have proven it is well-worth the cost.

28) Many African countries have adopted a local format of examinations. In most cases countries are still closely “tied” to their former post-colonial exam systems. Mauritius, Namibia and Botswana, for example, have kept ties with the University of Cambridge Examination Board to ensure appropriate standard setting for SE examinations. Ghana and Nigeria conduct their examinations under the auspices of the West African Examination Council (WAEC). South Africa has re-established a quality assurance Board for secondary education (Umalusi), and in 2005 has compared the standard of its examination questions against Scottish standards. Current curriculum reform activities in Africa are not always matched by reforms in assessment practices. The lack of alignment between curriculum and assessment can be a significant obstacle for implementing modern teaching and learning practices. In addition, “communication and professional information exchange” between the stakeholders and institutions at the national and local levels need to be improved.<sup>17</sup> The key priority should be ensuring the relevance of the curriculum content so that students can graduate with the knowledge, skills and attitudes that will allow them to function effectively in a rapidly changing economic and social environment. Also, reliable assessment instruments need to be supported by professional teacher development programs (in-service and in pre-service).<sup>18</sup>

29) Most importantly, the fast-paced evolution of science and technology and new application of “Information and Communications Technology (ICT)” need to be reflected in junior and senior secondary curricula. Further curriculum content and instructional methodology changes will be necessary in the Africa junior secondary classrooms to ensure that real opportunities to learn will cover a much larger proportion of the age group. Success in curriculum reforms in Africa, notably in renewing science and technology content should be the starting point for any country that wants to improve its basic and secondary education quality.

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<sup>15</sup> Schuh Moore et al. (2007). Lewin (2008). Mingat (2008).

<sup>16</sup> Leyendecker, Ottevanger and Van Den Akker (2007). See also Stabback et al. (2007) and Lolwana (2007).

<sup>17</sup> Leyendecker, Ottevanger and Van Den Akker (2007).

<sup>18</sup> Lefoka (2008), Lolwana (2007)

30) African countries face practical problems that often stand in the way of implementing more adequate assessment strategies. Assessment challenges include:

- the definition of standards and accepted levels of performance;
- differentiation between standard (core) and higher grade;
- new forms of assessment of skills, particularly as part of continuous assessment;
- improvements in the quality of examinations, especially in the area of assessment items, and training for those setting these items;
- improvements in moderating and monitoring, professional development and building capacity in the examination system;
- sensitivity to language problems of students;
- statistical analysis of the examination results to provide feedback on progress and effectiveness of the implementation of the curriculum.

### **Governance, management and accountability in basic and secondary education**

31) The dimensions of good governance, management and adequate accountability and transparency are multifaceted<sup>19</sup>. These dimensions are not specific for junior secondary education. However, it is generally accepted by most stakeholders that public investments in universal primary and junior secondary (as well as in subsequent levels of education) require good governance structures and efficient management. Monitoring and evaluating on the delivery of the primary and junior education systems and reporting the results (outcomes) to society is justified when significant public resources are spent on the education system. If the results are not satisfactory, society is much less motivated to provide additional public resources.

32) Of course there are specific measures that can be taken to enhance good governance, even if the “track record” of both governments and development agencies (in building capacity) is not impressive. For basic education (primary and junior secondary) in Africa accountability is even more important since many governments are now planning to expand their systems massively. This is a prerequisite for poverty reduction, creating more equity in the education systems, and helping African youth to become productive and informed citizens.

33) Africa’s youth is its major asset. Therefore educating its adolescents by providing them with basic knowledge and skills is as much an economic investment as a social imperative. HIV/AIDs, healthy lifestyles, tolerant citizens, healthy motherhood, and children who get a head-start in life by being well-cared for, can make important contributions to economic and social development of a country. They can also ensure significant savings for the country. Several studies point to evidence that secondary education graduates outperform their peers without junior and/or senior secondary education qualifications. Sierra Leone, Liberia, Rwanda, the Democratic Republic of Congo, Chad, and recently Kenya are all examples of countries that are / have suffered from conflicts. Not only should the human capital that has been lost in the conflicts be replenished if prospects for recovery are to bear fruit, but secondary education qualifications offer better prospects for avoiding conflicts altogether.

### **Science and technology: inputs for strengthening quality and competitiveness**

34) Over the past decade the power and potential of science and technology for economic growth and social development has been recognized and continues to develop ever faster. Consequently many OECD countries are regularly spending considerable resources to improve the quality and relevance of what their basic and secondary school graduates should master. “Education over the Internet is going to be so big it is going to make e-mail usage look like a rounding error.” So remarked Cisco’s chief, John Chambers, in an

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<sup>19</sup> Glassman D., Hoppers W. and DeStefano J. (2007).

article in The New York Times in 1999. But even the boss of a company that produces technology for the Internet might not have guessed just how large e-education would become. Called “Open Educational Resources (OER)”, anyone with Internet access can download teaching materials from many universities around the world. Could OER be a new “universal good” that will change how education is delivered? A new report, “Giving Knowledge for Free”, from the OECD’s Centre for Educational Research and Innovation (CERI), suggests this is a strong possibility, and sees several implications. “Giving Knowledge for Free” defines open educational resources as “digitised materials offered freely and openly for educators, students and self-learners to use and re-use for teaching, learning and research”. Learning content is put online so that it can be searched and used with flexibility by both learners and instructors. The content can be websites, text files, images, sound or videos in digital format. Some are issued only for use in a specific course, and others are open for adaptation and reuse in other courses.

35) The benefits of OER are several. They can expand access to learning, specifically for non-formal students groups (“second-chance” learners) and widen participation in “further learning”. They can be an efficient way of promoting lifelong learning, bridging the divides between non-formal, informal and formal learning. And they can be an asset for expanding education in developing countries. In short, they offer a radically new approach to the sharing of knowledge, at a time when effective use of knowledge is accepted as the key to economic success, for individuals, firms and countries.

36) Benefits of modern Science and Technology (S&T) can improve the way education services are managed and expand access in a more cost-efficient manner. The “widening gap” in Africa creates significant challenges for their economies. Joining the S&T revolution is not a choice for African education systems but an economic necessity. Otherwise its youth is falling even more behind in acquiring competitive skills and knowledge that can attract foreign investment and form the basis for economic growth.

37) Education processes such as curriculum reform, and technical curriculum and assessment services can be facilitated by modern technology. Software for school management and administration, websites for teacher support, examinations and testing services, open- and distance learning mechanisms, these can all be operated more efficiently and more easily when modern technologies are applied. These practices have been introduced with success in the education systems in most middle- and higher-income countries. And since the development of technologies continues at an ever more rapid pace, the benefits will grow with them. However, caution might also be warranted. Computers for example have seen several cycles of new technical models, potentially exposing governments and / or school operators to significant financial burdens. And many new gadgets are coming on the market each year.

38) Traditional technologies included the use of radio and TV (Video) for “second chance” learners and teacher education. Open universities came on board, starting in OECD countries and Asia. The open-learning institutions also started to work in basic education, using computers and other technology means. Two new agencies emerged, the Commonwealth of Learning and the Centre International Francophone de Formation à Distance, which promoted international cooperation in and through distance education. The environment within which technologies are applied to education also changes rapidly. For many African countries the gap is widening though, and the investment costs to bring new technologies into the classroom is significant (also because of the rapid turn-over)

### **The role of public-private partnerships**

39) Private involvement in secondary education in Africa affects both provision and financing<sup>20</sup>. The supply side features private secondary schools that deliver across the whole spectrum of the quality range. The operators of private schools and education organizations include “for-profit” and non-profit groups as well as religious groups. In addition there are community schools run by parents or community associations;

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<sup>20</sup>Verspoor (2008).

fee paying courses (run by teachers during “after-hours”) and private tutoring institutions and individuals.<sup>21</sup> Private sources of financing include formal and informal fees and charges paid by parents of public school students; contributions of NGOs who provide support for school improvement or expansion. In addition private suppliers may be contracted to build schools, publish textbooks or provide training of school management services. While governments everywhere have the responsibility to establish a policy framework that ensures access to secondary education of acceptable quality to eligible students, private school operators and suppliers of services, parents and communities all contribute to its implementation. At the school level their contributions are often inextricably intermingled. Sometimes their involvement reflects official policy; and oftentimes it is based on local ad hoc arrangements.

40) Public-Private Partnerships (PPPs) can take many forms. In most African countries the education sector is dominated by government supplied services. At the junior (and senior) secondary level, PPP services are growing fast. In Nigeria over half of the secondary schooling is provided through private operators, because parents are not prepared to wait for the government to react to their demands. The opportunities that are offered by PPP structures are in most cases underestimated by African governments, and not enough is done to use the “momentum” and “synergy” that PPP can offer in the context of a rapid and massive expansion of basic education.

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<sup>21</sup>Bray and Suso (2008).

### 1.3 Section 3: Practices that work in Africa (country team papers)

#### The need for better quality and relevance of teaching and learning

41) The country case studies submitted for the ADEA biennale include examples of curriculum reform designed to better reflect student life experiences and to impart skills and knowledge relevant to the social and economic environment. African countries have lately become more aware that their junior and senior curricula need fundamental reform. Country case studies show that the efforts to improve quality and relevance of what is offered by the schools include: reducing the number of subjects and the overload within subjects, updating junior secondary subjects into a core-curriculum (thus reducing costs and improving the teaching process), improving teaching methodologies<sup>22</sup>, providing better science and technology equipment (Zimsci kits)<sup>23</sup>, introducing learning with competencies (Madagascar). All countries insist that further reform of the curriculum and examinations is necessary. Many also recognize that, based on their recent experiences, that changes in junior secondary curriculum (with consequences for teachers jobs and qualifications, and negotiating with the stakeholder groups) is very complex and involve longer-term consensus building.

42) **Uganda's** primary and post-primary education policies focus on developing more relevant, skill based curricula. Uganda is also attempting to reduce the number of subjects offered at the junior secondary level, and introducing a "core" curriculum. The latter for cost and quality reasons. The approach is designed to improve formal reasoning and problem-solving and convey occupationally relevant knowledge. Teachers are also being trained in thematic, student-centered teaching methodologies.<sup>24</sup>

43) **The Gambia** has also taken steps to reform its curriculum. However, revision efforts have tried to incorporate too many emerging issues resulting in overloading. Additionally, while the education policies in the Gambia have embraced student-centered, competency based curriculum, teacher-centered methodologies often still prevail in practice. The Gambia has integrated Madrassa, traditional Islamic schools, into the formal school system. Madrassa and conventional public schools now have a common curriculum and shared syllabi.<sup>25</sup>

**Zimbabwe: Blueprint for quality instruction:** to ensure that education was relevant, of acceptable quality and yet affordable, the MOE in Zimbabwe:

- Developed a science kit, -the ZIMSCI kit- and provided it to all secondary schools
- Created an Integrated National Teacher Education Course (ZINTEC) comprising a short (4 months) pre-service module and 36 distance education modules
- Collaborated with private sector publishers to establish a list of approved textbooks and ensure an adequate supply of textbooks; for subjects with small expected print runs the Ministry would guarantee to purchase a minimum quantity
- Provided a minimum of 20 textbooks free of charge for every subject, in addition to per capita grants to schools.
- Established a compulsory core curriculum consisting of English, African Language, Science, and Mathematics, practical subjects and an optional social studies subject.

44) **Quality instruction through ZIMSCI kits.**  
In the

mid 1990s Zimbabwe introduced ZIMSCI kits into its secondary education curriculum to provide quality science and technology instruction despite limited resources and lack of suitably qualified teachers. Each kit contained materials and instructions necessary for one science experiment that could be performed without expensive laboratory equipment. Working in pairs, students could perform a weekly experiment. Teachers received training through radio and audio-cassettes. Practical Subject Kits, similar to the ZIMSCI kits, were

<sup>22</sup> SMASSE (2007).

<sup>23</sup> Chung (2007).

<sup>24</sup> Eilor (2008).

<sup>25</sup> Sey et al. (2007).

also introduced in the secondary education system in Zimbabwe. They covered a wider range of technical and commercial subjects. However, unlike ZIMSCI kits, the Practical Subject Kits were not provided to schools free of charge. Both the ZIMSCI and Practical Subject Kits emphasized problem solving and focused on relevant areas of knowledge. The popularity of both was ensured by the curriculum quality, low cost and flexibility of use.<sup>26</sup>

45) There is consensus among African policymakers that high-quality math and science education is important for a competitive labor force. However, science, mathematics, and technology education at the level of basic education (this includes ICT) face serious problems. These include: inadequate infrastructure (equipment, multi-purpose classrooms), and shortages of relevant learning and teaching materials. Perhaps most importantly there is a lack of properly trained teachers with a good mastery of the content and proper methodologies to transfer the knowledge. The SMASSE Inset (Science and Mathematics In-service Education and Training Services) pilot program in **Kenya** aims at equipping the teachers with the proper and practical pedagogical tools to improve the teaching process. The program has been successful in delivering the training and improving classroom practices, and positively changing the teacher and learner attitudes towards math and sciences. It has led to an increase in science enrollments in Kenya and has the potential of being upscalable through its two-level cascade model of training on the national and district levels.

46) **Madagascar.** The expansion of SE in Madagascar<sup>27</sup> has been marked by several issues and constraints that are similar to other developing countries in Sub Saharan Africa. On outcomes viewpoint, gender and social disparities (in favor of boys, urban areas and wealthiest quintiles), low enrollment and completion rates and low students learning outcomes are featuring the current SE system. Internal efficiency is low with high repetition and drop out rates. The system shows low cost-effectiveness with (i) a little proportion of public SE teachers who complies with the regular teaching time (20 hours per week), which is still lower than international practices; (ii) low students to teacher ratios due to a very specialized teachers system; and (iii) an excessive number of administrative staff. Quality of output in Madagascar's secondary education can be considered low compared to international standards, even though there are no reliable data. The 2004 national assessment on Sciences and Mathematics in grade 8 was an attempt to measure students learning outcomes and it shows that for both subjects, Malagasy students show low learning achievements (only about 3 percent have required basic skills in mathematics). In the last five years, the pass rates for the JSE and SSE exit exams were never above 50 percent.

47) Low quality of junior secondary education in **Madagascar** has several reasons like shortages of teaching and learning materials, but the most critical quality issue in secondary education is the poor qualification of teachers. Only 20 percent of teachers in junior and 33 percent in senior secondary education have the required teaching certificates. Poor preparation of junior secondary teachers is due, in part, to reduced capacity in teacher training. For pre-service training, there is only one centre at the national level with capacity for around 100 graduates a year and in service training does not exist. For senior secondary teachers, there is a need to harmonize the two tracks at the university level, the "Ecole Normale Supérieure" and the traditional faculties. As a result in large majority of classrooms, obsolete teaching practices are still the norm, such as rigid chalk-and-talk, teacher centered/dominated, and lecture-driven pedagogy or rote learning.

48) In its strategic development document, the Government of Madagascar (GOM) has decided to proceed to a holistic approach rather than to address separately each issue and by level of education. The GOM announced in November 2005 its plan for a new education structure with an extension of primary education from five to seven years, a reduction of JSE from 4 to 3 years and SSE from 3 to 2 years. This is expected to have a positive impact on secondary education for many reasons. Graduates of a seven-year primary cycle will be better prepared to meet the demands of JSE, thereby reducing current repetition and dropout rates and improving the internal efficiency of the system. It is also expected that reducing the

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<sup>26</sup> Chung (2007).

<sup>27</sup> Patrick Ramanantoanina, "Madagascar: the challenge of expanding secondary education and training." (2008)

length of JSE and SSE will encourage students to complete SE and reduce repetition and dropouts. Shifting students from the current JSE cycle to the primary cycle will also create room for more students in the secondary cycle where physical space and well qualified teachers are extremely limited. In terms of fighting against child labor, most graduates from this seven-year primary cycle will be around 15 years old -- the legal working age -- and better prepared for the school-to-work transition if they do not pursue further studies.

### **Cost-efficiency, increased access and equity**

49) Countries have tried various ways of achieving better cost-efficiency, and increase access to secondary education while also improving equity. Progress towards more equitable public spending has primarily taken the form of government-sponsored scholarships and direct subsidies to schools.

50) **The Gambia** is providing scholarships and bursaries to address gender inequities in primary and junior secondary education. A Scholarship Trust Fund was created in 1999 for girls. The government has also established three schools to address the special needs of students with learning disabilities and those who are blind or deaf and dumb.<sup>28</sup> In Tanzania, scholarships awarded to disadvantaged students contributed to a 42% increase in junior secondary enrollment, between 2003 and 2007 (from 401,500 to 967,000 students). The number of students receiving scholarships is increasing (34,000 students in 2006 and 48,950 projected in 2008).<sup>29</sup>

51) **Zimbabwe**. In the 1990s Zimbabwe achieved more equitable public spending in education by replacing traditional boarding schools with day schools for junior secondary. After Independence in 1980, Zimbabwe sought to enable all children to be within five kilometers of a primary school and to provide a secondary school for every five primary schools. One school out of five primary schools was selected as a potential site for a secondary school. These schools immediately established an “upper top”, that is, one or two secondary classes at the existing primary school, mainly through double shifting. The “upper tops” were to cover the first four years of secondary schooling. At the same time, the community undertook to establish a new secondary school at an adjacent site, with state planning, supervision and subsidies. Schools were to have a minimum of four classrooms, three teachers’ houses, and toilets. Electricity and expensive installations such as laboratories, technical workshops, halls, and libraries, were not included in the initial phases. This program enabled children to attend day secondary schools close to their homes that cost an average US\$50 per student, rather than the traditional boarding schools that cost an average US\$250 per student. Only 4% of communities were unable to respond to this partnership system and had to be provided for, generally by commissioning an NGO or church to assist them. The number of secondary schools expanded from 157 in 1980 to 1,512 by 1990, the majority of them day schools.<sup>30</sup>

52) **Uganda**. Private providers play a significant role in the expansion of secondary education in Uganda. In 2005, there were over 3,200 registered private and community schools, representing 46 % of all secondary schools and 37 % of all secondary enrollments. In reality, the number of students enrolled in private schools may be significantly higher as many schools are not licensed or registered. Private schools do not receive any assistance from the government and operate solely on fee revenues. About one third are community schools operated by the community (e.g. parents) or by NGOs without government funding. There are a few high quality elite private schools, but most private schools are not well resourced and provide relatively low quality education. Admission to government secondary schools is based on performance on the Primary Leaving Examination – with the best schools getting the best candidates. Admission to private schools is largely determined by ability to pay.<sup>31</sup>

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<sup>28</sup> Sey et al. (2007).

<sup>29</sup> Miyedu, C. (2007).

<sup>30</sup> Chung (2007).

<sup>31</sup> Eilor (2008).

53) **Burundi.** The provision of secondary education at the junior secondary (grade 7-10) in Burundi is dominated by the community schools which enroll 80% of the students, with government and private schools enrolling about 10% each. Community schools provide no boarding facilities and recruit their students locally. Some public schools do offer boarding and charge a boarding fee<sup>32</sup>. In practice the community schools receive much less support from the central government than the government schools: the student: teacher ratio in the community schools is 41:1 compared with 26:1 in the government schools; the student to non-teaching personnel ratios are 60:1 and 15:1 respectively. Moreover only one third of the teachers in the community schools have a secondary school teaching certificate compared with two thirds in government schools. These disadvantages are reflected in the costs per student estimated in 2005 at BF 40,850 (about US\$35) for community schools and BF 111,500 (about US\$98) in government schools. Unsurprisingly the better resourced teaching environment in government schools is reflected in the rates of repetition that exceed 20% in every grade and pass rates at the end of junior secondary education of 41% for public schools, 32% for community schools and 24% for private schools. While little is known about the latter the low figure probably reflects the performance of a large number of low-cost low-quality schools.

54) Notwithstanding the quality problems the community schools have made a positive contribution to education development in Burundi by: providing local, low cost access to junior secondary education; stimulating related local infrastructure development and job creation; creating an incentive for sustained community involvement in education; and establishing a channel for social communication and mobilization. Yet the system as it currently functions is inequitable as it provides the most public subsidy to the upper income families whose children enroll in the best public schools and attend in disproportionate number upper secondary schools and universities.<sup>33</sup>

<p><b>Community Schools: Promising Public-Private Partnerships?</b></p> <p>Community schools are an opportunity for partnership between the government and private local providers of education. They have helped rapidly and inexpensively expand access to junior secondary education in Africa. Community schools, however, raise the question whether quality of teaching and learning are being sacrificed for quantity. The community school programs are slightly different in each country but in most cases where access has been expanded, it has come at the cost of some degree of education quality.</p> <p><b>Positive aspects:</b></p> <ul style="list-style-type: none"> <li>• a solution for low-cost access to junior secondary education</li> <li>• provides an incentive for community cooperation</li> <li>• establishes a channel for social communication and mobilization</li> </ul> <p><b>Negative aspects:</b></p> <ul style="list-style-type: none"> <li>• higher pupil: teacher ratios</li> <li>• teaching staff predominantly locally hired and uncertified</li> <li>• do not adequately address persistent economic and rural-urban inequality issues</li> </ul>	<p><b>Open and Distance Learning in African countries</b></p> <p>55) T here are</p>
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limited examples of successful Open and Distance Learning (ODL) provision on the secondary level in Sub-Saharan Africa. The experience of Zimbabwe is interesting (ZIMSCI kits and ZINTEC teacher training). Some promising examples of institutions offering ODL on the secondary level include Botswana (BODOCOL), Namibia (NAMCOL), Zambia (ZACODE) and Mozambique. On the teacher training level, Malawi (College of Distance Education) and Mauritius are examples of successful ODL provision. There is growing acceptance of ODL in Africa because of its potential as the cost-effective and high-quality source of post-primary education.<sup>34</sup>

<sup>32</sup> The fee is however less than the costs associated with boarding; there is thus a de facto public subsidy to boarding students, most of which come from families in the upper income quintiles.

<sup>33</sup> Mukene et al. (2007).

<sup>34</sup> SAIDE (2007).

56) The two viable models for ODL in Africa are government monopoly and public-private partnerships/franchises. NAMCOL is the biggest secondary education provider in Namibia, and is mainly focused on learners who drop out of the formal education system. It is very well articulated with the national education system in Namibia in terms of following the same curriculum and examinations. This is also the case for BODOCOL, which in addition shares classroom, office space and equipment with conventional schools in order to increase efficiency. Both schools are governed and heavily subsidized by the government, cater to senior secondary school learners and align their curricula and assessment with the formal system. The international experience from India's National Institute of Open Schooling (NIOS) shows that one can also provide sustainable ODL with the input from the private sector. NIOS is the largest open schooling system in the world with more than 13.5 million students and is financed largely through tuition and examination fees.<sup>35</sup>

### **Practicing Public-Private Partnerships**

57) **Burkina Faso.** The Burkina Faso Burkina case offers an example of a more substantial framework to support the private providers. To respond to the rapidly expanding demand in the face of severe constraints on public resources the Ministry of Education (MOE) has established a formal partnership with the private sector. The private sector includes secondary schools with religious affiliations (Catholic, Protestant, Islamic), schools owned and operated by individuals, NGOs or voluntary associations and evening classes operated by associations and teachers unions). Annual fees in private schools range from CFA 40,000 - 250,000 (about US\$90-550), and CFA 8,000 - 15,000 (about US\$18-34) for evening classes compared to CFA 3,000 (about US\$7) for government schools. Registered private schools enrolled about 35% of the 300 000 secondary school students (2005/6); in addition, there is an unknown number of students enrolled in schools that have not registered.

58) The Burkina Faso Ministry of Education has established a Permanent Secretariat of the National Commission for Secondary and Higher Education to manage its relations with the private sector. Agreements with the Catholic Church, Association of Private Secondary Schools and individual private secondary general and technical schools have been signed. These allow the private providers to establish secondary schools reflecting their specific objectives, recruit staff and students, provide religious instruction, benefit from public subsidies and charge the fees as necessary for their operation provided they respect the national legislation, implement the national curricula, ensure the quality of instruction and accept the pupils assigned to their schools by the government. The Catholic Church and the Association receive an annual grant of respectively CFA 200 and 250 million (about US\$450,000 - US\$560,000) respectively; all participating schools receive CFA 50,000 (about US\$110) per government sponsored student in their school. For individual schools to be eligible for the subsidy they need to have been in existence for at least 4 years, have an examination pass rate of at least 30% and employ 50% of their teachers on a permanent contract. New junior secondary schools that are created are provided with two government paid teachers; communities and other providers are expected to contract additional teachers as needed.

59) In addition, the Burkina Faso government has been providing no-interest loans for the construction of classrooms in private schools operated by NGOs or private providers on condition that the owner builds one classroom within at most a year for each one constructed with government funds. The loan payback period is five years after a grace period of two years. Only those private schools that demonstrate efforts to improve the quality of education are supported by government through this scheme. Finally, the government includes private schools in its quality improvement efforts. Teachers, school directors, and pedagogical advisors of private schools can enroll in teacher training colleges and are always invited to participate in in-service training programs. Private schools can purchase the official textbooks at a full cost. Although private provision raises challenges of equity of access to education by all socioeconomic classes, the Burkina Faso strategy of mixing provision of services by expanding private where demand is high, and concentrating

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<sup>35</sup> Stanfield J. and Mitra, S. (2007).

public resources on lower income and underserved groups. The Ministry scholarship scheme to students from poor families to attend private schools have been proven effective in allowing students from low income families to get secondary education while the private sector and NGOs manage facilities with no recurrent cost for the government. Schools managed and operated by municipalities and NGOs deliver secondary education at low school fees, which has been proved affordable by parents in rural areas and poor community schools managed by the private sector, although they have higher student fees than those managed by NGOs and municipalities, may have ways of ensuring equity and quality of education in non-state secondary schools so as to increase enrollment without placing additional burden on the GoBF budget.<sup>36</sup>

60) **Senegal.** The investment and expansion strategy in Senegal is essentially a public sector one. Laws governing the creation of private school were liberalized in 1994, however, the share of students educated in private schools has decreased in recent years. The strategy for expansion of access to junior secondary education has been one primarily focused on the public sector through the “*école de proximité*,” local or community schools. Financial support remained limited and focused mainly on selected urban schools, many of which cater to the higher-income groups. Most private schools depend almost exclusively on fee-income. Private schools are rarely inspected and their staff is not invited to participate in training seminars. It is thus not surprising that in spite of the rapid enrolment growth at the junior secondary level, the share of the private sector declined from 40% in 2000 to 26% in 2006.<sup>37</sup>

### **Recruiting and retention of teachers and improving qualifications**

61) African countries are facing or will soon face a severe shortage of qualified teachers for junior secondary. Several different strategies to increase teacher supply emerge from the studies. Incentive packages, including housing and pay supplements, are being developed to increase the number of teachers in remote areas of the Gambia and Tanzania<sup>38</sup> as is local recruitment of contract teachers in Burkina Faso, Burundi, Mauritania, Senegal, Uganda.<sup>39</sup> Training polyvalent teachers qualified to teach more than one secondary level subject has begun in order increase teacher efficiency in Senegal and Burundi.<sup>40</sup> In addition to training polyvalent teachers, Mauritania is training bilingual teachers to instruct in both English and French or English and Arabic.<sup>41</sup>

62) **Benin** is reducing education costs by locally recruiting teachers. The government estimates that it will need to recruit approximately 35,000 new teachers by 2015 to adequately respond to increasing demand for secondary education. Often, locally recruited teachers are not formally qualified. As a result of local teacher recruitment, the number of qualified teachers in Benin decreased by 33 % (from 78% to 45%) between 2003 and 2006. In 2006, the government began subsidizing the training of unqualified locally hired teachers.<sup>42</sup>

63) **Zimbabwe:** Increasing the quantity of teachers without sacrificing quality. The strategy developed in Zimbabwe stands out for its success in maintaining quality as the teacher supply in the country was rapidly expanded. Zimbabwe established its Integrated National Teacher Education Course (ZINTEC) in 1999 to rapidly expand the country’s education system after Independence. It was based on the principle of universal primary education in Zimbabwe and sought initially to train an additional 9,000 teachers. The training program consisted of an initial four month residential training course. Students were then deployed in groups of three to selected schools. District tutors supported 30-40 students in the completion of 36 distance education training modules while they continued teaching, organizing weekend and holiday courses

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<sup>36</sup> Diagne and Sanwidi (2007).

<sup>37</sup> Ibid.

<sup>38</sup> Sey et al. (2007) and Miyedu, C. (2007)

<sup>39</sup> Diagne; Mukene; Oumar; Eilor, 2007

<sup>40</sup> Diagne and Sanwidi, 2007; Mukene and Burundi National Team, 2007.

<sup>41</sup> Oumar and Thiam (2007).

<sup>42</sup> Hountondji and Ali, (2007).

and grading assignments. In the fourth year of the training course, students returned to their colleges for a final four months of residential training.<sup>43</sup> ZINTEC's success lay in its capacity to rapidly increase teacher supply without sacrificing the quality of teacher training. ZINTEC courses were certified by the University of Zimbabwe Associate College system and students trained under the ZINTEC system eventually performed as well or better than students trained in traditional teacher colleges. ZINTEC students also benefited from earning a salary while continuing their teacher training, encouraging students from lower income families to pursue teacher certification.

64) Tanzania has developed a multi-pronged strategy to increase teacher supply to ensure the recruitment and training of sufficient numbers of primary and junior secondary teachers. It includes:

- a) expansion of traditional university programs;
- b) provision of loans to education students in universities;
- c) recruitment of non-education university graduates and providing them with short induction courses with a commitment that they will pursue a postgraduate degree in education;
- d) licensing of form six leavers who after a one month training are deployed to schools on condition that they enroll in a degree program with the Open University of Tanzania degree program as they continue teaching;
- e) recruitment of retired teachers.

The country studies show that many African governments are fully involved in the reform of their basic and secondary education systems and have begun to tackle the more intricate problems in their traditional primary and secondary education systems. The expansion of primary education for all to include basic education for all (from primary EFA to basic EFA) is not wishful thinking, but an economic and social necessity. All education stakeholders and the international development partners will need to join hands to make this happen. Courageous and (often painful) policy measures will need to be taken, and political consensus for the medium and longer term will be inevitable if sustained success is the goal for the reform. But the pay-off will be huge in economic and poverty-reduction terms. Best practices from middle- and higher-income countries have shown it takes on average five to eight years to implement "real and sustainable" reforms (this is the optimistic scenario). International donors will be called upon to provide more and better support for capacity building and supporting the implementation of new and more successful strategies for the expansion of access and the improvement of quality at primary and junior secondary levels.

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<sup>43</sup> Chung (2007).

#### **1.4 Section 4: links to a larger society and economic context**

65) The development of education has followed or accompanied economic growth in most countries and regions. The most recent example is East Asia. African economic growth has picked up in recent years and unless that momentum is sustained and accelerates further, the resources for the expansion of primary into basic education for all will not be available for the next generation of African youth. High-quality graduates are a pre-requisite for attracting international investment, which brings jobs and thus reduces poverty. Where economic growth has been stagnating, unemployment of junior and senior secondary school graduates often is a major social and economic problem.

66) Several economic issues also play an important role: the uneven growth in Africa, the small size of the modern manufacturing and service sectors, and the dependence on natural resources as the main source of economic growth. African economic growth stagnated during much of the 1980s and the 1990s and real income per capita increased only by 25% between 1960 and 2005. In recent years high commodity prices have helped accelerate economic growth in several countries. Debt relief accorded to 25 countries is helping to improve public finances. Yet, about half of sub-Saharan Africa's 750 million people still live in severe poverty, while prospects for sustained growth remain uncertain. Higher oil prices pose a risk for countries that do not have it (most countries). Most foreign investment in Africa still goes to oilfields and / or mines, rather than factories, services or farming. Mineral exploitation provides governments with cash but does not create many jobs. Private business, especially job-creating small and medium size enterprises are developing only slowly. Even South Africa, with its diverse economy can not create jobs fast enough: at least a quarter of its people have no work. Without a robust economic growth performance the desirable investments in secondary education will for most countries be unaffordable and difficult to justify economically as a priority for public expenditure.<sup>44</sup>

67) Preparing junior secondary students for further learning and technical training is important. It implies that curriculum change is an essential element of the transition from an elite system to a system that is inclusive and provides broad access. It will involve adaptation of content to the requirements of further education and training, work and society in the 21<sup>st</sup> century. Communication skills in one or two international languages, problem solving skills, experience with teamwork and basic competence in math, science and ICT are at a premium in the labor markets of growing economies in Africa as is the case in the OECD economies. But it will also involve redefining the concept of quality to reflect the needs and the capacity of the majority of students of a system with an increasingly broad coverage, instead of the requirements of a small elite who is preparing to pursue upper secondary and tertiary education.<sup>45</sup>

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<sup>44</sup> World Bank (2008)

<sup>45</sup> Ibid.



<p>to include lower secondary while maintaining the quality imperative: the case study of Gambia</p>	<ul style="list-style-type: none"> <li>• Primary GER increased from 59% to 76% between 1996 and 1998, growing at a rate of 2.7% for boys and 2.1% for girls over the same period. (6)</li> <li>• GER at lower basic level is 92%. (6)</li> <li>• Recurrent expenditure on education grew at an average rate of 9% between 1990 and 1996. (10)</li> <li>• Number of private basic schools decreased by 13% and private enrolment by 26% between 1999 and 2005. (10)</li> <li>• Education share of government budget: 20.8% (2001); 21.8% (2002); 15.4% (2003); 13.2% (2004); 21.1% (2005). (10)</li> <li>• Share of education budget allocated to personnel salaries decreased between 2000 and 2005 from 64% to 61% (10)</li> <li>• Expenditure on education per household (scholarships and bursaries) increased by 973.4%; allocations for goods and services increased by 29.4% (11)</li> <li>• Third Education Sector Program had financing gap of almost 25% by end of 2004 policy period. (11)</li> <li>• Proportion of girls in lower and upper basic in 2000: 40% (lower); 41% (upper). (13)</li> <li>• Currently, more than 30% of the teaching force is uncertified. (14)</li> </ul>
<p>Diagnosing the desirability and feasibility of reform in Tanzania</p>	<ul style="list-style-type: none"> <li>• Primary GER increased from 98.6% to 109% between 2002 and 2007; Primary NER increased from 80.7% to 109% over the same period. (6)</li> <li>• Girls constituted 48.9% of 2005 total primary enrolment; 49.1% of current secondary enrolment. (6,11)</li> <li>• Primary average book/pupil ratio improved between 2000 and 2006 from 1:20 to 1:3; Secondary pupil/book ratio improved from 1:30 to 1:12. (7, 11))</li> <li>• Examination pass rate at primary level improved from 28.6% to 70.5% between 2001 and 2006. (8)</li> <li>• Number of secondary schools increased from 937 in 2001 to 3,485 in 2007. (11)</li> <li>• Examination pass rate at secondary level increased from 77.4% in 2001 to 89.1% in 2006. (11)</li> <li>• Number of pupils receiving disadvantaged student scholarships increased from 34,012 in 2006 to 48,953 in 2007; total awarded (millions) increased from 5,704 in 2006 to 8,822 in 2008. (11)</li> </ul>
<p>The case of locating expansion of Post Primary Education and Training (PPT) within Holistic and Integrated Policy Framework in Uganda</p>	<ul style="list-style-type: none"> <li>• In 2006, there were 2,286 secondary schools: 807 government; 1,475 private. (12)</li> <li>• In 2003 private and community schools offered 92,000 S1 places compared to 86,000 places in government schools. (12)</li> <li>• Total lower secondary private and community school enrolment (S1 to S4) in 2003 was 345,000 compared to 300,000 in government school enrolment. (12)</li> <li>• Secondary female enrolment rate is currently 45.2%; 46% at beginning of S1, 45% by end of lower secondary and 44% at end of final upper secondary grade (S6). (12)</li> <li>• There are 149 government BTVET institutions (38%) and 600 private (62%). (12)</li> <li>• Government BTVET schools provide 10,000 training places, private BTVET schools, 40,000 training places. (12)</li> <li>• Male secondary enrolment in government schools: 126,642 (2000), 168,303 (2005); in private: 163,534 (2000), 163,534 (2005). (16)</li> <li>• Female secondary enrolment in government schools: 89,650 (2000), 124,221 (2005); in private: 139,105 (2000), 139,105 (2005). (16)</li> <li>• Female enrolment in university: 13,337 (2000), 23,118 (2003); in other tertiary institutions: 6,666 (2000), 7,777 (2003). (19)</li> <li>• University enrolment growth was 14.7% from 2004 to 2005. (19)</li> <li>• Estimated that poorest 20% of the population receive 13% of government subsidy for secondary education, while the population receive 34% of secondary education subsidy. (36)</li> <li>• Average government subsidy per student: US\$22 (primary); US\$148 (secondary); US\$860 (public university). (36)</li> </ul>
<p>The Potential of Open Schooling in Africa: A Case Study of India's National Institute of Open Schooling.</p>	<ul style="list-style-type: none"> <li>• Current National Institute of Open Schooling (NIOS) cumulative enrolment is 13.5 million (3)</li> <li>• Enrolment in Secondary and Senior Secondary courses increased between 2005 and 2006 from 151,833 to 161,833 (secondary) and from 115,193 to 130,192 (senior secondary). (5)</li> <li>• A total 32% of NIOS students appearing to take the 2006 examination were certified at the secondary and senior secondary levels; 34% of females appearing were certified at secondary level and 35% at senior secondary level. (7)</li> <li>• Since 1991, 1,283,798 learners have been certified by NIOS for secondary, senior secondary and vocational courses. (7)</li> </ul>
<p>Les partenariats public-privé dans le premier cycle de l'enseignement secondaire en Afrique de l'Ouest: le cas du Burkina Faso et du Sénégal.</p>	<p><b>Burkina Faso</b></p> <ul style="list-style-type: none"> <li>• 2006 population: 13.6 million; 2050 projected population: 39,093 million; Population growth rate: 2.3%; Birth rate: 46.7; 2006 life expectancy: 48yrs. (7)</li> <li>• In 2006-07 private secondary education accounted for 48% of secondary establishments, 42% of classrooms and 42% of secondary students. (21)</li> </ul> <p><b>Senegal</b></p> <ul style="list-style-type: none"> <li>• 2006 population: 11.9 million; 2050 projected population: 23,108; Population growth rate: 2.1%; Birth rate: 46.7; 2006 life expectancy: 56yrs. (7)</li> </ul>

Title of the study	Data Presented in study
établissements privés d'enseignement dans le système éducatif post primaire	<ul style="list-style-type: none"> <li>• Percent primary enrolment in private schools 11% (1999-00), 13% (2005-06) (9)</li> <li>• Secondary GER (taux brut de participation): 19% (2001); 36% (2006). (13)</li> <li>• Percentage of students enrolled in private secondary schools increased from 12.04% to 13% between 2001-02 and 2005-06. (14)</li> <li>• Currently, 85% of post-primary teachers are not certified. (16)</li> <li>• In 2005-06 there were 829 private general secondary schools and 422 public. (28)</li> </ul>
Les écoles communales et les structures alternatives de l'enseignement post primaire : stratégies d'extension de l'enseignement de base au Burundi	<ul style="list-style-type: none"> <li>• In 2005-06, 80% of lower secondary students were enrolled in communal schools (10)</li> <li>• Primary GER increased from 48% in 1999-00 to 72% in 2005-06 (11)</li> <li>• The percentage of primary students passing national exam to transition to secondary increased from 9% in 1999-00 to 13% in 2006-07. (15)</li> <li>• Percentage of female participation in communal schools at lower secondary level varied between 41% and 44% between 1999-00 and 2005-06. Female participation in communal schools at the senior secondary level varied between 41% and 44% over the same period. (18)</li> <li>• The number of communal secondary schools offering senior secondary level increased from 4% to 23% between 1999-00 and 2005. (19)</li> </ul>
Extension du 1er cycle de l'enseignement secondaire à l'enseignement de base	<ul style="list-style-type: none"> <li>• The GER for lower secondary increased from 15% in 1990-91 to 27% in 2004-05. Between 1990 and 2005 the number of students enrolled in lower secondary increased at an annual rate of 7%. (6)</li> <li>• The GER for senior secondary increased from 12% in 1990-91 to 22% in 2004-05. (10)</li> <li>• The acquisition rate at basic level ranges between 33% and 50%. The acquisition rate in science and mathematics at the senior secondary level is approximately 40%. (13)</li> <li>• In 2003, less than a third of content taught in the 5<sup>th</sup> year of basic education was effectively acquired by students. In 2003, science average math scores dropped from 26% in 1999 to 11% in 2003. (13)</li> </ul>
Review of the use of ODL systems in the provision of post-primary education in Africa	<ul style="list-style-type: none"> <li>• 35 SSA countries have secondary GERs below 40% and 15 below 20%. (4)</li> <li>• On average, the SSA region has a secondary GER of 25%.</li> </ul> <p><b>Namibia</b></p> <ul style="list-style-type: none"> <li>• NAMCOL is the biggest provider of secondary education. Total enrolment in 2005 was 26,826. (14)</li> <li>• In 2004 66% of enrolled students were girls, 34% boys. (14)</li> <li>• 0.05% of students were under age 16; 16% 17-19 years; 58% 20-24 years and 2% were 40yrs and older. (14)</li> </ul> <p><b>Botswana</b></p> <ul style="list-style-type: none"> <li>• The majority of BOCODOL students are 16-26 years. 68% of students are females, 32% are males.</li> <li>• In 2005, 22% of learners were enrolled at junior certificate level while 80% were enrolled at Botswana General Certificate of Secondary Education (BGCSE) level. (18)</li> <li>• Enrollment increased from 7,000 to 21,000 between 2002 and 2005. (18)</li> </ul>
Accelerating the Expansion of Access to Secondary Education. The 1980-1990 Experience of Zimbabwe.	<ul style="list-style-type: none"> <li>• By 1990 6% of primary schools and 13% of secondary schools were government schools. (9)</li> <li>• The percentage of boarders in the secondary school system decreased from 20% to 9% between 1984 and 1990. (10)</li> <li>• In 1989 3% of students who entered the "O" level examinations were accepted into "A" levels in 1990. (10)</li> <li>• The number of "A" level schools increased from 58 to 106 between 1980 and 1990. (12)</li> <li>• The number of secondary schools increased from 197 to 1512 between 1980 and 1990. Enrolments increased from 659,882 to 1,512,000 during the same period. (13)</li> <li>• In 1980, 97% of the 3,730 secondary teachers were qualified. The number of secondary school teachers increased to 7,300 by 1990; however, only 48% were qualified. By 1990, 7-10% of secondary teachers were student teachers and 10% were unqualified. (21)</li> <li>• The education budget rose from 4% of the state budget in 1979/80 to 23% in 1980/81 with the adoption of education reform. It remained at this level throughout the 1980s. (29)</li> <li>• The unit cost of secondary education in 1980 was Z\$473.14 (US\$735.83), by 1990 the unit cost had increased to Z\$1,257.82 (US\$257.82 due to major devaluation of the Zimbabwean dollar during the 1980s.) (30)</li> </ul>
The practice of INSET in Mathematics and Science Teachers and its Impact on Quality of Basic Education in Kenya	<ul style="list-style-type: none"> <li>• In 1996 the enrolment in 600 Youth Polytechnics (artisan courses for primary school leavers) was 40,000. (1)</li> <li>• In 2004 total secondary enrolment was 922,759. The transition rate from primary to lower secondary was 54%. The number of secondary teachers was 47,594. (13)</li> <li>• By 2006, a total of 17,194 district trainers, teachers and education managers had been trained under the SMA program. (19)</li> <li>• Between 1999 and 2006 Kenya Certificate of Secondary Examination (KCSE) scores improved 9% in physics and 50% in chemistry. (24)</li> </ul>

Title of the study	Data Presented in study
	<ul style="list-style-type: none"><li>• There are on average, 60 students per classroom at primary level and 70 per classroom at upper primary level</li><li>• A child in the first grade of the first cycle has approximately a 75% chance to reach grade six, a 47% chance to reach grade nine and a 15% chance to complete secondary education. (10)</li><li>• The rate of access to first grade is 90% for children in urban areas, 61% in rural areas. The completion rate is 65% for children in urban areas and 35% for children in rural areas. (11)</li><li>• In 2004, there were 27,631 first cycle teachers, 6,878 second cycle teachers. (16)</li><li>• Families contribute up to 17% of first cycle education costs, 8.8% of second cycle costs and 3.4% of higher education costs. (23)</li></ul>



Resource provision that inhibits expansion of access into basic education for all		<ul style="list-style-type: none"> <li>• Boarding only for students from more remote areas</li> <li>• Improve internal efficiency, reduce repetition and dropouts</li> </ul>
	Integrate part or all of junior secondary with primary education	<ul style="list-style-type: none"> <li>• Extend duration of basic education to 8 -10 years</li> <li>• Restructure the junior secondary curriculum</li> <li>• Allow the best primary teachers to upgrade to JSE subjects</li> <li>• Create better communication between primary and junior secondary schools (e.g. teachers with networking access)</li> </ul>
Junior and senior secondary curricula too academic and insufficiently relevant to demands of labor market and the national economy	Align curricula with formally established graduate profiles	<ul style="list-style-type: none"> <li>• Provide common core of general subjects in JSE</li> <li>• Modernize science, mathematics and technology (including ICT) subjects and the teacher training for these subjects</li> <li>• Include in the junior secondary curriculum subjects that provide skills for health, citizenship (civics, integrated science, life skills)</li> <li>• Avoid public, supply-driven vocational training (job-training)</li> <li>• Emphasize capacity for “life-long-learning” learning</li> </ul>
	Provide broad range of opportunities for further education and training beyond junior secondary	<ul style="list-style-type: none"> <li>• Maintain selective access to SSE (reform the selection mechanisms to be equitable)</li> <li>• Provide non-formal opportunities for further learning for all</li> <li>• Establish cost-efficient TVET systems with a range of programs and a mix of public and private providers</li> <li>• Provide opportunities for senior secondary students to take advanced mathematics and technology courses</li> </ul>
Learning achievement at the basic education level needs to be improved (internationally comparable quality and relevance standards of learning and teaching)	Protect basic conditions for teaching /learning	<ul style="list-style-type: none"> <li>• Ensure primary graduates master primary curriculum content</li> <li>• Align enrollment growth with resources and policy reforms</li> </ul>
	Ensure instructional effectiveness	<ul style="list-style-type: none"> <li>• Ensure adequate supply of textbooks and learning materials</li> <li>• Provide opportunities for teacher support and development</li> <li>• Use ICT to provide teachers with additional subject matter knowledge and assist with lesson preparation</li> <li>• Prepare head teachers for managerial responsibilities</li> </ul>
Access and opportunities to learn are inequitably distributed	Remove obstacles to girls attendance	<ul style="list-style-type: none"> <li>• Provide a safe environment and gender friendly secondary school policies</li> <li>• Allow and promote (provide incentives) for innovative and creative initiatives in school management, teachers, students and parent associations.</li> <li>• Include all stakeholders to help provide attractive role models for adolescents</li> <li>• Reduce distance to school and reform the school calendar (if necessary)</li> <li>• Provide primary and junior secondary schools with flexibility to adapt their timetables to school regulations</li> </ul>
	Provide opportunities for the poorer children	<ul style="list-style-type: none"> <li>• Ensure equitable access to primary schools of acceptable quality</li> <li>• Provide means tested financial support</li> <li>• Reduce / waive fees for poor children</li> <li>• Increase density of day school network</li> </ul>
Centralized decision making adversely affects resource use and learning outcomes	Increase school level responsibility for service delivery	<ul style="list-style-type: none"> <li>• Decentralize management decision making authority</li> <li>• Strengthen national education institutions</li> <li>• Tap readiness of communities to support local school</li> </ul>
	Redefine role of national authorities	<ul style="list-style-type: none"> <li>• Strengthen central level capacity to set standards, ensure equity, monitor quality, manage core financing, and support schools in difficulty</li> </ul>
Encourage multiple delivery mechanisms	Vary service delivery in response to local conditions	<ul style="list-style-type: none"> <li>• Create different organizational arrangements</li> <li>• Allow variations in curriculum choice and delivery methods</li> <li>• Encourage private training providers</li> </ul>
	Exploit potential of ICT and distance education	<ul style="list-style-type: none"> <li>• Establish systems for teacher support and development</li> <li>• Provide opportunities for secondary education equivalence</li> <li>• Life long learning</li> </ul>



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