AT THE CROSSROADS
Choices for Secondary Education in sub-Saharan Africa

EXECUTIVE SUMMARY

The challenges of education development in Sub-Saharan Africa (SSA) at the beginning of the 21st century are unprecedented and urgent. Faced with persistent gaps in the coverage of primary schooling, almost all countries have launched major efforts to ensure that all children will have the opportunity to complete primary education of acceptable quality. At the same time governments are committed to expanding access to further learning. This is not only a response to a rapidly increasing demand for access to secondary education, but also to the need to strengthen the national human capital foundation at a time when accelerating economic growth and social change create an urgent imperative for policy reform that few countries can ignore.

Today’s African youth will live and work in societies that are increasingly open and democratic, driven by technology, part of global networks of production and trade and, perhaps most importantly, undergoing rapid social and economic change. The existing high cost secondary education systems were designed to educate a small elite; they will not be able to provide a much greater proportion of the SSA’s youth with an education that effectively prepares them for work and for further education and training in societies with labor markets that increasingly demand advanced knowledge and skills and that put a premium on the ability to learn and acquire new skills throughout life. In this environment, linear expansion of existing systems is not an option, especially not given the constraints on public resources available for secondary education.

Changes in cost, financing and curricula will thus be inevitable, but perhaps even more important is the need to change the mental models (Senge, 2000) of schooling and education governance that continue to dominate policy and practice in African secondary education. Often ideology rather than pragmatism dominates policy making; evidence based policy decisions remain rare. Resistance to change is often deeply rooted in the education community. In many countries education policy is detached from a longer term vision for national development, and remains the concern of professionals in the Ministry of Education and captive of the pursuit of short term problem resolution. Firefighting and politics rather than development and capacity building typifies too often the practice of education policy.

There is an urgent need to for a realistic and pragmatic assessment of policies that can underpin longer term strategies for the development and improvement of secondary education in SSA. To support countries in this regard the Secondary Education in Africa (SEIA) initiative has supported a participatory process of analysis, dialogue and reflection since 2002. It was conceived by the Africa Region of the World Bank and

- help collect and summarize best practices for sustainable expansion and improvement of secondary general, vocational and technical education;
- identify policy options for sustainable reforms;
- provide a forum for discussion and partnerships among stakeholders in SSA;
- contribute to better donor coordination in support of secondary education reforms.

**Box 1: Food for Thought at the Crossroads**

**Summary Findings and Policy Choices**

- Sustained economic growth and participation in a global, technology driven economy is unlikely to happen unless a human capital threshold has been reached. Many SSA countries are trapped in a low level economic equilibrium where the human capital foundation is inadequate to support higher growth. Competitiveness in tomorrow’s economic environment will require an equitably accessible basic education of 8 or 9 years of acceptable quality and expanded, but selective and equitable, access to opportunities for further education and training.

- Secondary education does not contribute as effectively to human capital development as it could and should: student learning achievement is low, in rapidly growing economies the number of graduates is insufficient to respond to labor market demand and the per student cost is high. The system as currently financed and managed will be unable to respond to the social demand for secondary places or the labor market demand of growing economies for skilled people.

- Competing claims on national budgets and international assistance make it unlikely that the share of secondary education in the national education budget can be increased significantly; additional resources will become available only where accelerated economic growth increases public and private resources. But even where this happens, the expansion of access will in many cases not be possible unless resources are used more efficiently and the cost per student come down.

- It will be imperative for SSA countries to develop an African model for secondary education – one that responds effectively to national development needs, is sustainable in the constrained resource environment of most countries, but that also ensures equitable access and delivers a service of acceptable quality. The main elements would be:
  - Resource requirements consistent with the available national means;
  - Content relevant to and evolving with national development opportunities;
  - Emphasis on learning: no trade-off of quality for quantity;
  - Equitable access for the disadvantaged, especially girls;
  - Multiple delivery mechanisms;
  - Increased school based management responsibility and accountability;
  - Broadly conceived public-private-partnerships.

- Governments will need to create an environment where public and private resources combine to effectively support secondary education development.

- Curriculum reform is an essential element of the transformation of secondary education from an elite to a mass system.

- Flexibility and decentralization are the principal elements of management reforms.

- Meaningful expansion of secondary education must be based on the effective implementation of quality improvement at the primary level.

- Multi-lateral and bilateral development agencies should include expanded support for the development of secondary education and training in their priorities for support to the education sector, preferably in the context of sector wide approaches and based on comprehensive sector development plans.
The SEIA initiative has supported workshops in Kampala and Dakar, commissioned 8 thematic studies and several technical background papers\(^1\). This Report summarizes the findings to date and discusses policy options that countries may wish to consider and ways for the donor community to provide support.

The Report focuses on secondary education: the level after primary and before the tertiary level, addressing the education of youth from about 12-18, usually covering grade 7-12, including junior and senior secondary education with differentiated strategies for each. The emphasis is on general secondary education complementing earlier work on (technical) Skills Development in Sub Saharan Africa and the role of technical education and vocational training in (Johanson and Adams, 2004). Where appropriate the report discusses the linkages between general secondary education, the world of work and strategies for skills development.

**Mapping the Challenge**

Considerable evidence suggests that in much of SSA secondary education faces severe problems, precluding progress towards the education development objectives that countries have set for themselves. Virtually all countries need to address the triple challenge of expanding access, improving quality and ensuring equity. Few systems are ready to respond effectively to the major challenges that are around the corner. Due to differences in history, culture and policy choices, the state of secondary education varies dramatically across the continent; nevertheless most countries are starting from situations with a low number of youngsters completing secondary education, inequities in access, outdated curricula, poor learning achievement, public funding that is severely constrained and inefficiently used, expanding private provision and emerging public private partnerships. These initial conditions affect –in different ways- the priorities and opportunities for policy reform.

**Low enrollment and completion rates**

Of the respective age groups less than one in two youth enters junior secondary schools and less than one in four senior secondary schools. Yet, secondary education participation is increasing rapidly. In 1990/91 the secondary GER in Sub-Saharan Africa was only 19.1%. By 2004 the secondary GER had reached 30%. Since the region started from a very low base, it still lags far behind other regions in secondary education participation. About 30% of the age cohort completes junior secondary education and only 12% completes the full secondary course (Figure 1). The differences between countries remain significant. Botswana, Cape Verde, Mauritius, Namibia, Seychelles and

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1 All papers can be found on the SEIA website: [http://www.worldbank.org/afr/seia/](http://www.worldbank.org/afr/seia/)
South Africa enroll more than 80% of the population of the relevant age in junior secondary schools, while Burundi, Burkina Faso, Central African Republic, Niger, and Rwanda enroll less than 20%.

Technical/vocational education (TVE) generally occupies a small, often marginal position in school systems of SSA with less than 10% of total secondary enrollment is in technical and vocational schools, although variations are significant. The poorest countries generally have the lowest participation rates.

**Access remains inequitable**

In most countries secondary education benefits the better off urban groups of society but remains largely inaccessible for rural populations, with girls at a particular disadvantage. The GPI for junior and secondary education for 2003 is 78. The EFA/MDG target of eliminating gender disparities by 2005 has not been reached. Demand and supply factors interact to become long-lasting obstacles to girls’ enrollment and retention. Many poor children never enter primary school or drop-out before reaching the final year. For those that manage to complete and then are successful in the secondary school selection process, the obstacles to enrollment remain formidable. Tuition and other formal and informal cost are often unaffordable. Secondary schools frequently are located in larger towns and cities or are boarding schools, implying cost that poor rural parents can ill afford. Where scholarships are available they are often poorly targeted. Opportunity cost for students of secondary school age are often significant, while societal pressures and tradition often militate against poor children, especially girls, who want to continue their education at the secondary level (TRANSE, 2005). Figure 2 illustrates the education disadvantage of the poor in Tanzania and Mozambique.

![Figure 2: Access to secondary education by gender and wealth](image)

Source: Edstats

**Curricula are outdated and increasingly inappropriate**

The content of programs has rarely been adapted to the changes in the composition of the student body that are taking place or the new life skills needed in societies that face health threats such as HIV/AIDS, are increasingly open and democratic and where young people are increasingly mobile. Neither have they evolved with the changing labor market demand for competencies relevant to participation in a technology driven global
economy. Many students leave school ill prepared for further learning and skill acquisition in formal education or in informal work settings.

Formal public technical and vocational programs at the secondary level have mainly focused on pre-employment training. The economic stagnation of the 1980s devastated programs that mainly served the public sector; programs and institutional arrangements often have changed little since they were established in the 1970s. A recent World Bank study concluded that many TVE institutions in the region fall short in their relevance to economic and social needs, their effectiveness in delivering skills and their cost and efficiency (Johanson and Adams, 2004). Many have neglected the informal sector; have become supply driven; and slow to respond to the changing needs of the labor market. Moreover, investments –including those funded by donors- have too often focused on expensive specialized training starting at too early a stage in the education cycle.

Levels of learning achievement are poor
Student performance on international tests is lower than in any other region. Many students do not acquire the knowledge and the skills specified in the national curricula and are ill prepared for further education or working life. Grade 8 students from Sub-Saharan Africa perform poorly on international tests when compared to other participating countries. The average score of the best performing SSA country on the 2003 TIMMS test –Botswana-366/365 points out of 800 points is well below the international average (Table 1). Quality issues are of concern also at the senior secondary level. Curricula are typically overloaded and closely linked to preparation for university entrance (Bregman and Bryner, 2003). Yet, students are often poorly prepared for higher education. Their limited mastery of mathematics and sciences and inadequate proficiency in the language of instruction are major causes of quality problems in higher education in Africa.

Public financing is unable to meet the demand for additional places.
Enrollment growth in most low income countries in SSA has outpaced the increase in resources available for secondary education. Given the numerous competing demands on constrained public resources, many governments find it impossible to mobilize sufficient funds to accelerate the development of secondary education, while fees and other private cost result in the de facto exclusion of poor students. In several SSA countries with substantial commitments to universalizing primary education, 50% or more of recurrent expenditure is allocated to primary schooling. Higher education typically absorbs 15-20%. This leaves some 20-25% of recurrent education expenditures for secondary education, a share that is unlikely to increase much.
To respond to the increased demand for secondary places, while constrained by the public funding, countries have spread the same resources over larger number of students (Table 2), attempted to mobilize private funding or most often did both. Exacerbated by inefficiencies in the deployment of resources, essential inputs often are in short supply resulting in shortages of textbooks, instructional materials and supplies, poorly stocked libraries and double or triple shift use of facilities. And as government funding stagnates, parental contributions have become an essential complement to public funding.

**Resources are used inefficiently**

In country variations in per student cost are large and mainly random (Figure 3). The main cost variable is the cost of teachers. Yet teacher deployment is often wasteful and ineffective. Moreover, in some countries teacher salaries are unsustainable multiples of GNI per capita. In others they are so low that teachers are almost forced to find a second job or leave the profession. In many countries the output of teacher training programs is insufficient to meet the demand. In others the government cannot afford to hire all those that graduate. As a result untrained teachers often make up 20% of the cadre and can account for as much as 50% with most working as temporary or contract teachers. Yet, teacher salaries often crowd out allocations for other expenditures, resulting in severe shortages of textbooks and instructional materials, adversely affecting the effectiveness of instruction.

The high cost burden of secondary education is also associated with the fact that in SSA per student cost in secondary education is much higher than in primary education. Secondary per student cost is a much higher multiple of primary per student cost in SSA than in OECD and middle income countries. On average, unit cost at junior secondary level are about three times and at senior secondary six times greater than at the primary level. The reasons lie in a combination of lower pupil-teacher ratios, higher salary costs, boarding subsidies, and larger numbers of non-teaching support staff. The cost per student of TVET typically is even higher, but with small enrollments it usually represents a small share of the total education budget. In countries where the secondary GER is above 70% the

| Table 2: Average annual growth (%) in secondary students and teachers in SSA |
|---------------------------------|----------------|----------------|----------------|
| students                        | 4.8           | 6.6            | 7.5            |
| teachers                        | 2.9           | 5.3            | 4.3            |

Source: UIS 2006

![Figure 3: Cost per student and results in Junior Secondary government schools in Chad (2003)](image)
The secondary/primary unit cost ratio is almost always less than 2:1. The higher the ratio the lower the GER is likely to be.

**High share of private funding**

Private cost of public schooling -comprising official government tuition and boarding fees, contributions to school management committees as well as cost such as textbooks, learning materials, school supplies, private tuition, transportation and clothing- are significant in many countries. It is therefore not surprising that faced, in addition, with severe competition for places and concerned about the perceived decline in the quality of instruction, transmission of social values and safety in government schools, many parents enroll their children in private schools. UIS estimates that 13% of the secondary students in SSA are enrolled in private institutions. In reality this proportion is likely to be significantly higher, since many private schools are not registered. There are large differences between private schools: some are high cost elite schools, while others are traditionally church sponsored schools that usually offer programs of acceptable quality at medium or low cost. More recently an increasing number of for profit institutions offer programs of varying but often low quality and cost. Non-government providers of secondary level technical education and training have a significant and growing position in Africa and often eclipse public schooling opportunities.

Households are thus shouldering a large share of the cost of secondary institutions. In Kenya, Uganda, and Tanzania more than half the total cost per student is financed through fees and other contributions (Lewin, 2006). In Zambia, private sources of income accounted for 48 percent of total expenditure at government urban high schools, 33 percent at government rural high schools and 52 percent and 57 percent in grant aided urban and rural high schools, respectively. In Francophone countries the privately funded share is usually less, but represents still 30% in Benin for example. In a region where GNI per capita in a majority of countries is less than $500, participation in secondary education with a cost often of US$ 200-3000 equivalent, represents a heavy financial burden, even for middle income families. In many countries fees and private cost often make it impossible –in the absence of effectively targeted financial support- for the few poor children that complete primary education to enroll in secondary school (Lewin, 2006) further skewing participation towards wealthy households.

**Many forms of public-private partnerships are developing**

Various schemes have been established to help students overcome the financial obstacles to enrolling in secondary education. These include fee waivers in public schools, government scholarships or vouchers that students can use to attend private schools and free textbooks. Another strategy is designed to expand the capacity of private providers to enroll students by providing loans for the construction of additional classrooms, payment of the salaries of teachers in private schools or grants-in-aid to private providers (often churches). Sometimes these subsidies are linked to the enrollment of disadvantaged students. Public-private partnerships for technical education and training are increasingly common with public resources channeled through intermediaries such as national training authorities, which use competition for funding by public and private TVET institutions, norms and output based allocations and student vouchers as financing...
instruments (Johanson and Adams, 2004). It is very clear that in most countries the government will not be able to be the sole source for financing and provision of secondary education. At the school level private and public sources are already intertwined to support the delivery of education services. A key policy question thus concerns the role of the government and the way public resources can be deployed and leveraged most effectively for secondary education development.

The lessons of International Experience
The lessons that can be drawn from countries where the transformation of secondary education from elite to a mass system has already been completed are important for African policy makers, facing the often intractable challenge of secondary education development. The education history of industrialized countries shows the strength and the disadvantages of bottom-up and non–selective (United States) and top-down highly selective (Europe) secondary education development strategies. The East Asian experience underscores the importance of linking secondary education development to economic growth and emerging labor market needs. Conversely, Latin American countries may be paying the economic growth price for the relative neglect of secondary education. But there is a limit to the relevance of international lessons of experience as the economic and education environment in Sub-Saharan Africa is very different than the one that prevailed in other regions when they were making the transition from a selective elite secondary education system to a system that expanded opportunities education and training beyond the primary level to an increasingly large proportion of young people:

- Progress towards the goal of universal primary completion and improvement in learning achievement remains incomplete (UNESCO, 2006), while in the US, Europe, and East Asia large scale secondary education expansion took place when universal completion of basic education had largely been achieved.
- Economic growth in SSA, while much improved in recent years, remains uneven and is often fragile.
- A high fertility rate will in many SSA countries result in a rapidly growing school age population through at least the middle of the century (United Nations, 2006); conversely a demographic transition eased the challenge of expanding access to secondary education in other regions.

The international experience reviewed in this report suggests four lessons that African policy makers may consider:

- The balanced development of different sub-sectors of the education system is a bottom-up process; broad access to primary education of acceptable quality must be in place for successful development of secondary education with a gradually upward shifting emphasis of policy and public resource allocations.
- How resources are spent is as important as the amount of resources available; this means a clear definition of the role of the government, pragmatic evidence based policy choices, efficiency in the use of public resources and allocation to inputs that are most cost-effective in their impact on learning.
• **Government direction and leadership** is important to accelerate and sustain progress and ensure equity; yet decentralization and local autonomy holds considerable promise especially in the early stages.

• **Public-private partnerships are essential** to mobilize the necessary resources, nurture community support and ensure that secondary education responds effectively to the expectations of local communities and national leaders.

**Secondary Education and Development**

The role of education and human capital in promoting the growth of economies and improvements in human well-being is well recognized in the economic literature and routinely reflected in the political discourse in developed and developing countries. Much of it has emphasized the importance of primary education. Recent micro- and macro-economic evidence highlights, however, the significant contributions to economic growth that secondary education can make. Moreover, its impact on social outcomes can further strengthen a country’s human capital and improve economic performance. Conversely, sustained economic growth is essential if the resources necessary for accelerated secondary education development are to be mobilized.

**Emerging micro-economic evidence**

A well established body of empirical evidence (e.g. Psacharopoulos and Patrinos, 2000) suggests that private rates of return decline for higher levels of education. This may no longer be the case. Possibly reflecting an increased supply of primary graduates and changes in the skills demanded in the labor market, recent evidence suggests that returns might increase with the levels of education. Studies in Latin America and East Asia come to similar conclusions (Di Gropella, 2006). At the same time there are studies that show low returns to education especially in countries where economic growth has stagnated. Youngsters in Sub Saharan Africa often are not able to capture the high returns as in many countries job opportunities limited and unemployment among educated youth is high. But in fast growing countries with historically low secondary enrollments such as Tanzania and Uganda, Bennell et al. (2004) found that secondary graduates were effectively absorbed in the economy, although often after a lengthy search.

**The impact on economic growth**

A large number of studies have investigated the link between education and economic growth. On balance the evidence clearly suggests that secondary education is associated with an acceleration of economic growth and can make a significant contribution to a country’s economic performance. It has done so in East Asia and Latin America. It should be able to do so also in Sub-Saharan Africa, but often does not do so. Based on the Mankiw et al. (1992) data, Glewe et al. (2006) analyze the contribution of education to economic growth in Sub Saharan Africa suggesting that skills learned per year of schooling are lower in Sub-Saharan Africa than in other parts of the world. Importantly, an increasingly robust body of evidence suggests that the quality of secondary education, especially in math and science, has a stronger impact on economic growth than the number of years of schooling. Equitable access to secondary education for poor students, and especially girls is an additional factor enhancing countries’ economic growth performance (Birdsall, 2006; Dollar and Gatti, 1998). These findings are further
supported by research suggesting that the productivity advantages of foreign direct investment (FDI) are subject to human-capital threshold effects linked to secondary education attainment.

Social outcomes
There are powerful development interactions between the various aspects of the human resource. The evidence for SSA is summarized below:

- In most countries the well established impact of primary education on better health of mothers and children outcomes improves further with secondary education, especially for girls; several such as HIV/AIDS and STD awareness and prevention are particularly important for adolescents.
- The education of girls and women especially, has a strong downward impact on fertility rates, helping to relieve demographic pressures. Girls that extend their education until secondary school (i) get married and have children later than other girls; (ii) tend to have their children further apart; (iii) more commonly use contraception. Lower fertility has a strong positive effect on economic growth.
- Youth of 15-24 years now make up almost one third of the 38 million people living with HIV/AIDS. The impact of secondary education is especially important. Those in school are less at risk than those out of school, especially girls. Those with more education tend to have lower rates than those with less; they tend to be better informed about transmission mechanisms.
- Secondary education can provide adolescents with skills that foster social cohesion and transmit the cultural and ethical values necessary for active participation in a democratic society and creates opportunities for social mobility.

Implications
Evidence that investments in secondary education will produce considerable private returns and contribute to economic growth and social progress has been documented in many studies. In Sub Saharan Africa however, returns are mixed and the contribution to growth has not been comparable to other regions. This reflects in part the region’s disappointing growth performance. But it is likely that another important part of the explanation is the impact of the poor quality of education as well as the persistent inequities in the distribution of education opportunities and human capital assets. There is a clear danger for countries to get caught in a low equilibrium trap where...
the education system confronted with increasing enrollments and constrained financial resources is incapable of producing the educated personnel necessary to increase the productivity of labor or adopt and adapt technological innovations, which in turn precludes the mobilization of the resources necessary for a meaningful increase in the human capital base of the economy (Figure 4).

Crossing the human capital thresholds and moving to a higher level of economic performance will almost always require “ambitious investments in education” (Berthélemy, 2006) in conjunction with improvements in the efficiency of these investments. In some countries this may require a reordering of priorities for public expenditures and increased allocations to education to ensure broad access to quality basic education and the development of further education and training opportunities. In many others the scope for increases in the share of education in public expenditures does not exist. Economic growth and increases in public revenue will be necessary to provide a sustainable basis. Most importantly policies will need to aim at improvements in the productivity of government expenditures, leveraging them with private funds and targeting the poorest as a priority for public funding.

Building a strong human capital foundation for countries to take-off on a path of sustained economic growth will require a minimum threshold level of “education stock” in the workforce and continuous investment in the improvement of human capital since the minimum threshold evolves over time. Strategies for education development in SSA will have to be shaped by this need to rapidly strengthen the human capital base. This will involve improvements in the quality of primary education, increases in the primary completion rates and the expansion of access to junior secondary education. While conceptually sequential in action in all three areas will need to be implemented simultaneously to support a dynamic process of economic growth that can draw on increasingly educated and trained personnel and at the same time strengthen the resource base for education and training.

With the considerable progress at the primary level, the expansion of access to junior secondary education which is increasingly considered part of a basic education cycle that as soon as feasible should be available to all without regard to ability to pay, is becoming a policy priority that no country can ignore. At the senior secondary level where returns are closely linked to economic growth and labor market demand, and a higher proportion of the benefits are private, progress will be much slower and publicly supported access will remain much more selective for a considerable time. Targeting public expenditures to poor but deserving students must be a high priority in this context.

While the potential benefits of an increase in a nation’s human capital driven by investments in secondary education are substantial, they are by no means automatic.

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2 The Red Queen in Lewis Caroll’s “Through the Looking-Glass” (1872) describes the phenomenon quite accurately: “Well, in our country” said Alice … “you’d generally get to somewhere else -- if you ran very fast for a long time ...”. "A slow sort of country!" said the Queen. "Now, here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"
They are critically dependent on effective macro-economic and institutional policies. A good investment climate lets the private sector expand, helps trade flourish and will support economic expansion. Mitigating market and policy failures responsible for rigidity and segmentation in the labor market will enhance employment opportunities. Strong institutions – such as stable political systems, secure property rights, efficient financial systems, honest and accountable public officials - are key productive assets. Only in these environments are ambitious education investments feasible and justified.

At the same time the nature of education policies matters. Policies that accommodate demand pressures without attention to quality and relevance can lead to a vicious circle of declining quality, stagnation in the growth of human capital, inability to increase productivity of capital and labor, stagnating public and private resources and further declines in education quality. Similarly policies that ignore the imperative of an equitable distribution of education opportunities -between girls and boys; students who rich and poor; irrespective of where they live- carry within them the seeds of social conflict and reduced growth performance. On the other hand where the macro-economic and political conditions create a favorable environment, investments in secondary education can help accelerate economic growth.

Towards an African strategy for secondary education development
Providing a place in schools of acceptable quality for larger cohorts of children every year, keeping these children in school for a longer period in an environment where prospects of economic growth remain uncertain, while external assistance and national public expenditures are confronted with many competing priorities, is an intimidating policy conundrum for most SSA countries. Increasing public funding for education – with an increasing share for secondary education is almost always the preferred solution of education planners and policy makers. In practice this will often be difficult to realize given competing priorities within the education system itself and in other sectors of the economy. In most countries, either kind of reordering of priorities will only have a marginal effect on the availability of resources for secondary education. Economic growth and increases in the share of GDP available for public expenditures will, therefore, have to be the main source of additional public resources for education. In addition and most importantly, policies designed to using resources more efficiently can contribute significantly to the expansion of access and the improvement of quality of secondary education. But, even large increases public spending and gains in efficiency will be inadequate to generate even moderate increases in education attainment and learning achievement unless accompanied by reforms that move towards a model of provision that recognizes the specificity and the constraints of the SSA context.

It will therefore be essential to sequence priorities, define specific medium term objectives and recognize that several desirable goals need a longer term time frame. Three objectives can be expected drive secondary education policy throughout the region in the medium term:

• Significantly increase the number young people that have the opportunity to complete a basic education cycle of 9 or 10 years that incorporates all or part of junior secondary education.
• Create opportunities for further formal and informal learning for all students interested and capable of doing so.

• Ensure that opportunities for learning of acceptable quality are available to poor students, especially girls.

• Prepare students for work in an economy that is participates in a technology driven global economy.

Given the different initial conditions of each country to define there can of course be no rigid African model. At best such a model can provide guidance and policy options that countries would do well to consider as they formulate national strategies that would allow significant progress towards their medium term objectives. Lewin (2005) suggest a typology of 5 different country situations, but argues that most countries are likely to face the challenge of a high (or at least rapidly increasing) coverage in their primary system and a low or at best medium coverage of secondary education. Usually, the latter will be considered socially unacceptable and inconsistent with national development objectives and countering it a key policy priority. As country situations are converging in this direction several common elements of strategy can be identified, most importantly:

• Resource requirements consistent with the available means;

• Curriculum content relevant to national development opportunities;

• Emphasis on learning: no trade-offs of quality for quantity;

• Equitable access for the disadvantaged;

• Local management of secondary schools;

• Multiple delivery mechanisms;

• Broadly conceived public private partnerships.

Resource requirements consistent with national means

All projections of the cost of secondary education make it abundantly clear: enrollments in secondary education cannot be expanded at present unit cost levels. This makes it imperative to use available resources as intensively and as efficiently as possible. This may imply that teachers teach a full load of 25 hours or more; buildings are used in double shift, six days a week and possibly year round; curriculum options and choice in small schools are limited; boarding is the exception not the rule; public-private partnerships are developed to expand access with particular attention to the needs of poor students.

Personnel cost are the largest expenditure item in secondary education budgets. They need to be managed with particular care. Inefficiencies in teacher deployment are in many countries a major cause of high per student cost. In some countries teacher salaries are at a level that effectively precludes significant enrollment expansion either because of salaries that are an affordable high multiple of GNI per capita or because of unrealistic qualification requirements. An affordable salary structure may require moderation in salary increases and a review of recruitment policies and qualification requirements. In other countries salaries are so low that teachers will only provide a minimal effort, with adverse consequences for quality. An efficient use of the teaching force may require an increase in teacher salaries with the understanding that each teacher will teach a full load.
–even if it means teaching in more than one school; that preferential increases will be
granted to teacher who can teach several subjects; and that teacher who do not have a full
load will be paid in proportion to the number of hours they teach. Efficiency gains
associated with such policies should result in changes in the cost structure of secondary
education with a significant increase in spending on non salary items, especially
textbooks and other instructional materials.

Bruns et al (2003) have proposed indicative benchmarks to guide the development of
primary education with the support of the Fast Track Initiative (FTI). Accepting their
resource mobilization parameters and assuming a share of higher education of 15-20%
would suggest a share of the budget for secondary education of 25-30%, including TVET
at the senior level (Table 3). The benchmark for the share of private financing of
secondary education reflects the current reality of significant private funding of publicly
and privately provided secondary education as well as the fact that in countries where the
share is currently very high it will be next to impossible to enroll a larger share of the age

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group without increasing or redeploying public funding. The benchmark for the pupil-teacher ratio assumes a teacher:class ratio close to 1.25 and recognizes the inevitability of large classes as in many East Asian countries - 45 in junior and 40 in senior secondary education. With appropriate investments in teacher development and instructional materials this should not preclude instruction of acceptable quality and a reduction in repetition.

The benchmark for the share of private financing of secondary education reflects the current reality of significant private funding of publicly and privately provided secondary education as well as the fact that in countries where the share is currently very high it will be next to impossible to enroll a larger share of the age group without increasing or redeploying public funding. The benchmark for the pupil-teacher ratio assumes a teacher:class ratio close to 1.25 and recognizes the inevitability of large classes as in many East Asian countries - 45 in junior and 40 in senior secondary education. With appropriate investments in teacher development and instructional materials this should not preclude instruction of acceptable quality and a reduction in repetition.

The extent to which countries can move towards these service delivery conditions will of course vary considerably depending on national conditions. Moreover the ability of governments to raise revenue and allocate resource to the education sector beyond the benchmark indicators will have an important impact on the participation rates that can be achieved with the benchmark service delivery conditions. In any case progress towards these benchmarks should allow most countries to reach enrollment rates for junior and senior secondary of 60% and 30% respectively by 2015.

The cost of construction classrooms and specialized facilities is another important cost item that needs careful consideration. At the junior secondary level facilities can resemble primary school facilities, which can often be constructed at reasonable cost by communities without expensive specialized rooms (as is the case for example in Kenya where the government has only constructed classrooms in the most disadvantaged areas). School infrastructure often stands unused for long periods of time. Double-shift use of facilities - even in rural areas - is often an attractive option for generating cost savings. Singapore only discontinued it in 2000. Year round use - implying fewer hours of instruction each day, but more school days combined with double shift instruction or staggering of holidays is an option that has been used in some school districts in the US that face severe shortages of classrooms.\(^3\)

Expansion of secondary education will have to take place largely through day schooling. Boarding facilities are expensive to build and operate. Access should be limited to students who do not have access to day schools within a reasonable distance from their home. Financial support should be available for poor, academically qualified students who live too far from a day school. In any event, ensuring that opportunities for secondary education are available close to student’s home will be essential element of any affordable and equitable secondary education development strategy. It will imply

\(^3\) There even is a National Association for Year Round Learning (NAYRL) with a website that provides many past and present examples: http://www.nayre.org/
consideration of adding junior secondary (or upper primary) classes to primary schools, establishing a network of small schools and consideration of multi-grade teaching methods.

None of the above options are easy to implement. They deviate from the way things have always been done and they require different ways of thinking about how schooling is organized and how the available infrastructure is used; they also require different ways of employing and deploying teachers and structuring their contracts. Innovations in the way schooling is delivered that target resources on those inputs that most cost-effectively produce student learning and use these intensively, can result in reductions in the cost per students while improving achievement.

A central policy issue concerns the role of the government in secondary education development. National conditions will determine the specifics. But, in general, key priorities are:

- Policy formulation, setting of standards and monitoring of progress towards national goals.
- Provision of funding to support a broad based equitable expansion of junior secondary education of acceptable quality as well as a selective expansion of senior secondary education and TVET in conjunction with incentives for private provision and subsidies to ensure equality of opportunity.
- Offering incentives and partnerships to non-government providers that are ready provide education opportunities of acceptable quality also to disadvantaged children.

**Curriculum content relevant to African development opportunities**

Education development will need to be part and parcel of national development strategies. Where it progresses on a separate path it will very rapidly become irrelevant and be considered an item of privately or publicly funded consumption, rather than an essential investment in economic and social progress. The experience of East Asian countries suggest the importance of an education development strategy that evolves with the national economy and helps young people adopt values and attitudes that help them function as responsible citizens and productive workers. But changes in economy and society can take place rapidly – as was the case in East Asia. This implies that changes in education policy priorities and curricula in response to evolving national development priorities will have to take place regularly.

Curriculum reform is an important part of the transition of secondary education in SSA from elite to a mass system. In many countries curricula and examination systems have changed remarkable little for decades; often the colonial legacy is still clearly visible in the structure and content of what is being taught. The case for curriculum modernization is driven by concerns about local relevance in rapidly changing societies; the different priorities and aspirations of a much larger student body with a changing social composition; and the need in growing economies to train the personnel required for effective participation in a technology driven global economy.
This is leading countries to consider to:

- **Include all or part of junior secondary education in a basic education program of 9 or 10 years.** JSE curricula should emphasize instruction in subjects that are critical to attaining the desired exit profile of graduates including mathematics, science and an international language; they should also ensure that students acquire analytic and problem solving skills and most important have the motivation and the competence for further learning and skill acquisition; and recognize the importance of preparing students for healthy living and active participation in rapidly changing increasingly democratic societies.

- **Strengthen the linkages with and preparation for the world of work** through vocational preparation modules in general senior secondary schools or occupation specific training in TVET institutions. SSE will need to develop towards a system that offers a wide range of education and training opportunities to students graduating from junior secondary school. Access will have to remain selective for the foreseeable future, especially in general secondary schools and formal training institutions. To provide opportunities for further learning to those that do not gain admission in these, will be important to support the development of other training opportunities in non-formal institutions, through apprenticeships, or in training centers operated by private providers and enterprises. Some of these will be full time programs; many others will be part time possibly in combination with work.

- **Improve mathematics and science teaching** by establishing an integrated core science curriculum at JSE, improving teacher qualifications and ensuring an adequate supply of instructional materials thus providing incentives for students to select math and science streams at senior secondary level. This is especially important given the robust research evidence that suggests that strong performance in math and science in international assessments is strongly associated with economic growth performance and the weak performance of students from SSA in these subjects.

- **Incorporate ICT in the curriculum** and improve the quality of instruction by establishing linkages with non-government and private providers of training and technical support to ensure basic understanding of and competence in the use of ICT by teaching at JSE computer literacy including the use of common software programs and in SSE the principles of computer science and the use of more advanced applications for research and problem solving

- **Reform examination and assessment systems** in support of curriculum reform and implementation by moving towards curriculum referenced examinations, regular national assessments of student learning and participation in international or regional assessments for comparison purposes. Training teachers in classroom assessment techniques is probably one of the most effective ways to improve student learning.

This is an ambitious agenda, implementation of which will require systemic articulation and selectivity. This process of curriculum change will only be successful if it is explicitly designed to ensure the linkages between the different parts of the system. JSE needs to build on primary curricula and be designed as part of a seamless basic education program. SSE needs to build on JSE curricula and have explicit linkages to the entry
requirements of tertiary institutions. Both JSE and SSE curricula will need to emphasize the skills for further learning and skill acquisition. Improvement in mathematics, science and technology teaching cannot be implemented as a nationwide program. Initially the efforts will inevitable need to be focus on selected schools. Priorities for public support in this regard should be given to those schools that serve disadvantaged clientele and that propose collaborative arrangements with non-government agencies and private operators.

Vocational training is often considered as trigger for economic growth and a way to reduce youth unemployment. In fact there is scant evidence that it has done so. But in countries with strong economic growth it has played an important role in preparing a workforce that has supported a rapidly growing modern industrial sector. And where this happened, students had strong basic education skills (at least 9 years). The development of vocational training should thus accompany rather than precede the development of a modern industrial sector and take place mainly through flexible training programs following junior secondary education or more formal schooling at the tertiary level for advanced technical and engineering training. In most African countries at this point the demand for personnel with this kind of training is limited; and predicting specific skill requirements a long time in the future is very hazardous, especially when done by government agencies.

On the other hand preparing junior secondary students for further learning and technical training is important. Existing curricula most often are not designed to do this for a large proportion of the age group. Curriculum change is thus 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 21st 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 SSA as is the case in the OECD economies.

Managing this sequence implies policy decisions about transition processes and the rate of expansion of junior and secondary education that is financially and educationally feasible, which will critically determine the nature of secondary education development and its contribution to social progress and economic development.

**Emphasis on learning: no quality-quantity trade-offs**

Without ensuring the quality of opportunities for learning, expansion of access to secondary education is a meaningless waste of resources. This makes it imperative to invest scarce resources in those inputs that most cost-effectively affect student learning achievement, specifically

- **Capable and motivated teachers**, i.e. teachers with the necessary subject matter knowledge expertise in teaching and classroom management skills; they should be paid reasonable salaries, work under conditions where effective instruction can take place; conversely they will have to accept take on a full teaching load and teach large classes.
• **Instructional materials** in particular textbooks, basic equipment and supplies in particular for teaching math, science and ICT. This will require reforms in the way curricula are designed, requirements are determined, production and presentation standards are set and textbooks are published, procured and distributed.

• **Curricula** that reflect the changing composition of the student body as well as the demands of African development.

• **School leaders** who create an environment focused on learning, where all school personal accept accountability for results, i.e. student learning.

• **Instructional time** that is optimally used to promote learning, implying a well organized schools where little time is wasted, and where staff and students are present when they are supposed.

• **District and central services** that monitor school’s progress in improving student learning and provide support as and when needed.

• **Communities** that provide a supportive home environment to students and assist schools to carry out their mission.

In the resource constrained environment of education Sub-Saharan African protecting quality will mean resource allocation policies driven more by evidence and pragmatism and less by beliefs, ideology or group interest. It may mean slowing down expansion to protect learning. Ultimately it is the “quality imperative” that must determine the pace of development of secondary education.

**Equitable access for the disadvantaged**

Inequity in the opportunity to learn and complete primary education remains a major obstacle for disadvantaged students that aspire to enter secondary school. Poor parents often cannot afford the direct and indirect cost of secondary education. In addition distance and socio-cultural traditions are make rural parents reluctant to enroll their children -especially their daughters – in secondary schools located so far away that boarding is inevitable. Strategies that effectively address these inequities will have to be multi-faceted. They will need to include actions to include the overall effectiveness of secondary schooling –of which disadvantaged students usually benefit disproportionally; interventions that target specifically the institutional and educational obstacles faced by specific groups of students –most importantly girls; and measures which eliminate financial barriers, possibly through conditional cash grants as has been done successfully in Brazil, Mexico and Bangladesh, for example.

Making secondary education accessible to more African adolescents will inevitable mean increasing the density of network of day-schooling opportunities beginning at the junior secondary level. A system of local junior secondary schools would meet the needs of the local communities who often cannot afford boarding fees and expanding equitable access. Such schools could be associated with nearby basic schools, possibly in the form of upper primary classes and rural secondary schools as was done for example in Thailand (Box 2) and Zimbabwe immediately after independence. This in fact was the model adopted at the beginning of the 20th century in many industrialized countries. But equity cannot be limited to access. It also needs to apply to the quality of the opportunity to learn that is provided in these smaller schools. It is unlikely that it will be possible to establish a
dense network of senior secondary schools or technical/vocational training institutions in the immediate future. This means that many students that come from remote areas will have to board. Targeted financial support will often be a necessary policy instrument to ensure equitable access for the most disadvantaged students.

Perhaps most important will be to target public expenditures to ensure that qualified poor students are not excluded from pursuing secondary education because of inability to pay. A private share in secondary education expenditures of 35% and a significant increase in secondary enrollments (table 3) will only be feasible if public expenditures are explicitly allocated to promote equity in access and opportunity to learn.

**Box 2: Thailand: Expanding Secondary Education**

Until 1970 secondary schools mainly prepared for employment as civil servants, professionals and teachers. Enrollments in secondary education were only 14 percent of the youths aged 13-18, although primary education reached over 83 percent of children aged 7-12. The continued lack of investment in secondary education led to an undereducated workforce: by 1990 83% of the workers had finished only primary education. With a rapidly growing economy the need to modernize the work force created a sense of urgency for rapid expansion of secondary education.

Such expansion was brought about first and foremost by the revised conceptualization of secondary education as basic education for the general public and the work force as well as preparation for the professionals. Compulsory education was expanded from 6 to 9 years. A multipronged strategy for secondary education development included:

- Expansion of more than 4000 primary schools to teach lower secondary, and conversion of primary facilities that were underutilized because of a declining birthrate;
- Establishment of over 500 new secondary schools in rural areas where no secondary or extended primary schools existed.
- Revision of the highly competitive admission policy of the exclusive secondary schools to provide opportunities for students from differing backgrounds to enroll.
- Gradual abolition of tuition fees starting with the extended primary schools and rural secondary schools.
- Recognition of alternative forms of education including recognition of graduates from non-formal education and establishing special schools for disabled children and welfare schools for marginalized children, especially HIV/AIDS orphans and street children.

By 2005, the secondary enrollment ratio exceeded 70% while lower secondary education had become almost universal enrolling 90% of the age group.

*Source:* Kasama Varavarn presentation to East Asia Study tour; World Bank, 1996

**Multiple delivery mechanisms**

Secondary education provision takes place in several different ways: upper primary classes covering a few or all years of the secondary curriculum, separate middle schools and combined junior secondary and upper secondary schools of academic (e.g. gymnasium and prep schools) and a wide range of formal and informal vocationally programs. Secondary education policy in Sub Saharan Africa will need to be pragmatic and flexible to allow different ways of provision to respond to the very different conditions in different parts of the country and the different demands for education and training of students especially beyond the junior secondary level.

A similar flexibility will need to apply to the curriculum, especially at the senior level where options and choice become increasingly important. Not all schools will be able to offer all options. Especially smaller schools will be able to offer only a core curriculum.
with a limited choice. Even in larger schools offering a large number of options chosen by only a few students can be very costly and often offers adds little value-added to the education experience. Vocational training can often be offered part time, as apprenticeship programs or in training centers operated by enterprises or private training providers. The duration of technical training will vary depending on specialization. Private providers offering training are ubiquitous in many African cities. Distance education and open learning programs⁴ are increasingly important delivery mechanisms, which provide alternative pathways to learning and certification for students and teachers. When combined with ICT they provide increasingly effective mechanisms to overcome the constraints of traditional schooling.

Encouraging this diversity and providing a qualification framework that establishes equivalence and ensures portability are important elements of post primary education policy that countries are beginning to tackle. Southern African countries have made considerable progress in this regard.

**Locally managed schools**

Strengthening the local autonomy for the operation of schools should be an essential feature of African secondary education strategies. This will allow local administrators and schools to choose the most appropriate way to provide secondary education given the local opportunities and constraints. It will also allow them to take responsibility for the development and improvement of secondary schools. Decentralization of resources and decision making to districts and schools is happening in almost every country in SSA. So far results have been mixed and progress hampered by weak institutions and local level capacity constraints. But there is considerable evidence that local autonomy in the management of schools can have a positive effect on school performance. Within a framework of national core instructional objectives, supervised and supported by central and district authorities with money and technical assistance, schools can be asked to take explicit responsibility for student learning.

In most African countries there is a considerable excess demand for secondary school places, and local authorities, communities and parents are usually willing to support the development of locally accessible opportunities for further learning. In fact, local initiative played an important role in the development of secondary education not only in the USA in the beginning of the 20th century but also in Kenya’s Harambee movement in the 1970s. Tapping into the readiness of communities and parents to support the development of secondary schools in their community by providing resources to complement those that can be locally generated and strengthening the capacity of local stakeholders -school personnel, community leaders, members of SMCs and BOGs- can be a cornerstone of secondary education development in SSA.

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⁴ Distance education is the delivery of learning or training to learners who are separated, mostly by time and space, from those who are teaching and training. Open learning programs are usually based on independent or part time study, which permits entry without formal entry requirements and with minimal barriers of age or time while recognizing prior learning. The two come together in the concept of Open and Distance Learning (ODL).
In such a system the principal role of central government agencies will no longer be to deliver secondary schooling but rather to monitor quality, make available core financing, provide support to schools in difficulty and ensure equity in access and opportunity to learn. Such a strategy will require intensifying and accelerating the ongoing decentralization processes, rethinking the responsibilities of staff and administrators at different levels of the system and rebalancing central management and local management responsibilities. The result would be a system that within a centrally defined framework is managed at the service delivery level by service providers -school administrators and staff- with meaningful involvement of the front line beneficiaries – students, parents and communities. But this can only happen in an environment where there exist competent local administrations. They exist in some countries but not in others. In the latter case strengthening the capacity of local administrations is a prerequisite for effective decentralization.

**Public-private sector partnerships**
Partnerships with non-government providers will almost inevitably be a key element of successful secondary education development strategies. In East Asia such partnerships have played a key role in creating an environment for a rapid expansion of secondary education. A similar strategy can be attractive in many countries in SSA Partnerships can occur in a number of different ways but will most often include government financial support to private provision, including community provision; and often private financing for publicly provided schooling. In virtually every country in SSA parents contribute an important share of the cost of not only private but also public secondary education.

The challenge is to structure these partnerships in such a way that they work effectively and that public and private sector partners can contribute in those areas where they are best placed to do so. A clear legal framework, transparency in resource allocation, explicit indicators for accountability and open and participatory procedures for consultation on policy and implementation are the preconditions for effective public private partnerships. Where these are not well designed the objectives of the public intervention will not be realized.

**Summary of Policy options**
Table 4 summarizes the review of the policy options that governments may wish to consider. Quite clearly there is no single best way for the development of secondary education and training; initial conditions in each country will determine what the priorities and what is feasible over what time frame in different countries. Mapping the status and challenges of secondary education, identifying financial and political constraints and opportunities are essential pre-conditions for effective action. The Table 4 should thus be considered as a checklist of choices that have produced results in other contexts which may or may not be replicable in other situations.

**Implementing Reforms**
Discussions on education reform usually focus mainly on the substance of the reforms that countries may want to consider. Yet much of the literature on school reform and
<table>
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<th>Issue</th>
<th>Possible Response</th>
<th>Options for specific actions</th>
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| Cost poorly aligned with domestic resources                         | Reduce per student cost                                                          | • Increase teaching load to 25 hours/week  
• Adjust teachers salaries  
• Double shift use of infrastructure  
• Boarding only for students from remote areas  
• Improve internal efficiency, reduce repetition |
| Integrate part or all of junior secondary with primary education     |                                                                                  | • Extend duration of basic education to 8 -10 years  
• Simplify curriculum  
• Upgrade primary teachers to JSE subject matter specialists |
| Curriculum not relevant to demands of labor market and modernizing society | Align curricula with formally established graduate profiles | • Provide common core of general subjects in JSE  
• Strengthen math and science teaching and introduce ICT  
• Avoid occupation specific vocational training  
• Emphasize capacity for further learning and life skills |
| Provide broad range of opportunities for further education and training beyond junior secondary |                                                                                  | • Maintain selective access to SSE  
• Provide non-formal opportunities for further learning  
• Establish TVET systems with a range of programs and providers  
• Provide opportunities for students to study advanced mathematics, science and ICT |
| Learning achievement is unacceptably low                            | Protect basic conditions for teaching /learning                                  | • Ensure primary graduates master primary curriculum content  
• Align enrollment growth with resources and policy reforms |
| Ensure instructional effectiveness                                   |                                                                                  | • Ensure adequate supply of textbooks and learning materials  
• Provide opportunities for teacher support and development  
• Use ICT to provide teachers with additional subject matter knowledge and assist teachers with lesson preparation  
• Prepare head teachers for managerial responsibilities |
| Access and opportunities to learn are inequitably distributed        | Remove obstacles to girls attendance                                            | • Provide a safe environment and girl friendly school policies  
• Provide attractive role models  
• Reduce distance to school |
| Provide opportunities for poor children                             |                                                                                  | • Ensure equitable access to primary schools of acceptable quality  
• Provide means tested financial support  
• Reduce/waive fees for poor children  
• Increase density of day school network |
| Centralized decision making adversely affects resource use and learning outcomes | Increase school level responsibility for service delivery                       | • Decentralize resources and decision making authority  
• Strengthen local institutions  
• Tap readiness of communities to support local school |
| Redefine role of national authorities                               |                                                                                  | • Strengthen central level capacity to set standards, ensure equity, monitor quality, provide core financing, and support schools in difficulty |
| Encourage multiple delivery mechanisms                              | Vary service delivery in response to local conditions                           | • Create different organizational arrangements  
• Allow variations in curriculum choice and delivery methods  
• Encourage private training providers |
| Exploit potential of ICT and distance education                     |                                                                                  | • Establish systems for teacher support and development  
• Provide opportunities for secondary education equivalence  
• Life long learning |
| Promote Public Private Partnerships                                 | Establish clear legal framework                                                  | • Ensure transparency in resource allocation,  
• Create explicit accountability indicators  
• Encourage demand side financing schemes |
| Set up participatory processes.                                     |                                                                                  | • Open and participatory procedures for consultation on policy and implementation |
change emphasizes that ultimately it is the quality of implementation will determine the success of the reform, i.e. the extent to which schools adopt the reform. The difficulties of changing classroom teaching practice are well documented. The readiness of schools and local administrators for change will determine to a large extent the feasible pace of implementation. But the mental models of change will be determined by the way change strategies are designed, communicated and practiced by central level authorities.

The politics of change
Secondary education policy reform is almost always controversial. This reflects the fact that secondary education is not just a technical problem, it is almost always a political issue with potential winners and losers lobbying to protect their interest. Successful implementation requires political will and progress will depend first and foremost on the readiness to take difficult decisions and sustain them over the long period of time it usually takes to implement them. It typically will involve efforts to build national consensus and support for policy and reform objectives through consultative practices for policy development, effective communication strategies, transparency in decision making and resource allocation processes and a willingness to consider evidence and lessons of experience even when that questions preconceived ideas and conventional wisdom. Success has more often been associated with pragmatism than with ideology or paying-off political opponents.

Political will often derives from a national development vision which links education development to national development strategies. This involves the interaction between education and the economy, with a clear understanding that these two national development priorities are mutually dependent and reinforcing. But –as the experience of East Asia demonstrates- the emphasis on education's development role is driven by priorities that go well beyond economic issues, as education can play a key role in nation building, including building the moral values and national cohesion required to make a multi-ethnic society work. And it is particularly at the secondary level –with adolescents- that both labor market preparation and the moral aspects of education are particularly important.

The experience in SSA also shows that rapid change is possible once it becomes a political priority in the context of national development. In South Africa the reform of the education system became a priority for the first democratically elected government in 1994. Sweeping changes were implemented within three years. Further reforms were implemented to deal with concerns about low “matric” 5 pass rates which resulted in an increase from about 50% in the mid-nineties to 70% a decade later, although concern about the quality of the passes especially in math and sciences remains. Zimbabwe after independence in 1980 launched a massive program to expand access to education to black students who had previously been excluded. The Harambee movement in Kenya has impressive record expanding secondary opportunities in rural areas.

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5 Grade 12 examination certifying secondary school completion.
The practice of change

Education reform and in particular secondary education reform is a complex and multifaceted process that has often failed to produce the promised results. The best ideas often have faltered on the rocks of implementation. Fortunately experience is accumulating and lessons are being learned as countries – in Africa and in other regions– are grappling with the challenges of secondary education development. Several trends are becoming apparent

- *School systems* are increasing transforming themselves into a *system of schools* where the responsibility for improvement and performance is shifting from the central level managers to the school level.
- *Evidence based strategies* are at the root of successful reform. Where rigorous evaluations using quantitative and qualitative information are absent, learning becomes based on anecdotes, opinion and prejudice.
- *Broad communication of challenges and achievements*, public discussion of policy options and transparency in decision making are key ingredients of effective implementation strategies.

Implications for the Bank

After almost two decades of relative neglect secondary education and training is back as an important element of the education support strategy of several key development partners, including the World Bank. World Bank support for education development happens through financial support – in SSA mainly IDA credits (low interest loans) and grants – and through analytical work typically carried out in close collaboration with staff from Ministries or research institutions in the countries concerned.

Lending

Annual amounts of lending tend to fluctuate significantly: secondary education was 39% of total education lending in SSA in FY04 but 0% in FY96; vocational training comprised 20% FY94 but only 0.5% in FY93. Single investments can have an important impact. Secondary education has been supported in ten countries in SSA since FY03 or two or three every year; support for vocational training projects is wider spread over countries - 3-5 a year but the scope as reflected in the amount committed tends to be rather small. With the exception of a few projects that focus almost exclusively on secondary education –Tanzania and Burkina Faso– the amounts committed for secondary education also tend to be rather small - $5-6 million in FY 05 and FY06 spread over components in several countries.
Lending instruments vary depending on country conditions. In Burkina Faso the instrument is a Specific Investment Loan while in Mali 20% of the second phase of an Adaptable Program Loan\(^6\) (APL) for the Second Education Sector Investment Program is supporting the development of secondary education, in particular the second cycle of basic education (Grade 7-9). In Senegal the second phase of an Adaptable Program Loan (FY07) is supporting mainly lower secondary education.

Support for education in the Africa region is increasingly channeled through Development Policy Loans (DPLs)\(^7\). In FY05 $188.5 million—more than half of all education lending in SSA was provided through these instruments (Hicks, 2006). Tanzania and Uganda are examples of this approach although in somewhat different ways. In Tanzania the DPL (FY04) follows a sector adjustment approach with tranche release conditions linked to the implementation of secondary education policy reforms. In Uganda annual poverty support credits (PRSCs) provide general budget support for the implementation of the national Poverty Eradication Action Plan (PEAP) with a detailed matrix of policies and results. Policy dialogue and assessment of implementation progress takes place annually during an education sector review which includes a Post Primary Education and Training Plan (PPETP). Implementation of the government undertakings agreed during these sector reviews is a prior action for the PRSC.

**Analytical work**

There have only been two formal country specific in-depth studies of secondary education issues: Uganda (Liang, 2003) and Madagascar (Ramanantoanina, 2006) in recent years. In Tanzania a draft secondary education strategy report was developed by the government supported by the World Bank and other Development partners to lay the foundation for the Secondary Education Development project referred to before. For several other countries—Nigeria, Cameroon, Benin, Ghana and Zambia— the SEIA initiative has supported country studies. Economic analysis in appraisal reports in for example Malawi (Education Sector Support Program) and Burkina Faso highlights the parameters for financial sustainability. Many CSRs include an analysis of secondary education issues and recommendations for policy reform—although typically less in depth than for primary education—but only a few actually provide a framework for action and are followed by financial support to the secondary sector.

\(^6\) An Adaptable Program Loan (APL) provides support for a long term development program by releasing three tranches in support of specific investments based on a set of agreed performance indicators known as triggers.

\(^7\) DPLs are rapidly disbursing policy based budget support assistance, with a greater emphasis on defining and measuring results. The majority have a programmatic approach, where a program of reform is agreed upon with the government, as well as a timetable for implementation. This program is supported by a series of (normally) single tranche operations, which come into effect as certain benchmarks are met as defined in the policy matrix. A DPL policy matrix—usually with about 10 core triggers—summarizes the key results which will trigger further assistance (Hicks, 2006).
International support

External assistance to secondary education has been limited (Figure 6), although some donors have consistently provided significant support for TVET investments. Several promising developments suggest that this may be changing. Lower secondary education is increasingly considered as part of basic education and part of the EFA agenda. Many countries have developed education development programs that include secondary education and vocational training plans or provide for a detailed sub-sector review of policy and financing issues. Donors – DFID, JICA, and the Netherlands for example – are increasingly ready to provide financial support for these programs.

![Figure 6: Education Aid in SSA by sub-sector 1999-2005](US$ billions)

Future support

The Africa Action Plan (The World Bank, 2005c) identifies secondary education and skills development as one of its priority areas (Box 3). The Bank is ready to support SSA countries as they design and implement policy reforms that aim to accelerate the expansion of access to lower secondary education and the diversification of opportunities for further education and training at the senior secondary level. However, the pipeline for future lending and analytical work looks weak, and needs to be strengthened to ensure sustained progress towards the goals of the Africa Action Plan.

The task ahead is to capitalize on the knowledge base that all this analytical work provides in working together with countries on the development of country specific strategies that can be supported financially by the Bank and other Development Partners. Specific action in this regard will need to include:

- Sharing the findings of this report and other analytic work with a broad audience of African decision makers, education professionals in African region and outside, and development partners in order to establish an understanding of the urgency to act and an awareness of the most promising policy options for reform.
- Developing country specific analytic foundations for national planning and consultation with stakeholders as well as for policy dialogue and financial support.
- Incorporating secondary education in the Bank’s CAS papers and in supporting the inclusion in PRSPs.
- Supporting secondary education as much as possible in a sector wide policy framework, linked to the national PRSP and METF to improve visibility on the longer term financial basis for action.
- Using flexible lending instruments such as APL, SIPs or PRSCs whenever possible.
- Carefully monitoring the implementation progress of reform programs, learning the lessons of experience and adapting interventions accordingly.
- Explicit support of quality, equity and financial sustainability should be hallmark of bank support

**Box 3: The World Bank Africa Action Plan: Building Skills for Growth and Competitiveness**

The quality and relevance of Africa’s post primary education systems raise deep concerns about its ability to absorb technology and innovation. The number of students aspiring to post-primary education is growing rapidly, putting unprecedented pressures on systems with barely the capacity to cope today. Skills training is poorly financed, provides too few opportunities, often at too high a cost, and typically fails to give trainees an adequate preparation for the labor market. It is critical to invest in the secondary and tertiary education in order to foster local technical expertise and managerial skills.

As the World Bank Group’s and its development partners’ knowledge base deepens about how to tackle these challenges most effectively, the impact will be felt in a progressive realignment of IDA allocations in support of post-primary education, from the current share of about 22 percent of the commitments in education projects (6 percent for secondary education, 3 percent for vocational training, and 13 percent for higher education) to a share of at least 35 percent, so that it plays an increasingly effective role in promoting the growth agenda.

**Action:**

- Develop and implement operational plans for IDA support to secondary education in 12 countries and for technical, tertiary, and research institutions, including agricultural education, in 8 countries by FY08.
- Step up analytical work and IDA support for technical, tertiary and research institutions; including agricultural education; help strengthen links between them and the productive sectors.
- Complete at least five new education country status reports that put the overall policy challenges of growing systems of post-primary education in perspective;
- Develop a baseline database on skills and productivity levels of labor force to complement Investment Climate Assessments. Business surveys will be used systematically to monitor investors’ perceptions of the quality and relevance of post primary education programs.

**Source:** The World Bank, 2005

**Conclusion**

The imperative of reform of secondary education can no longer be ignored in Sub Saharan Africa. The transformation of a traditional elite system that prepares a few privileged students into one that provides opportunities to further learning to a rapidly increasing proportion of adolescents is one that is taking place throughout the region. But the challenge is not one of expansion only; it is one of quality improvement, relevance and equity at the same time. Linear expansion of existing systems –more of the same- is not an option.
The challenge is particularly daunting since economic growth remains fragile, population growth rates will be high for the foreseeable future and primary education still requires additional resources if the EFA goals are to be reached. Even with the most cost-effective strategy, secondary education development will almost always require additional public resources. Mobilizing these resources may in some countries involve trade-offs with other sectors and allocation choices within the education sector. But in most cases it will require sustained economic growth, the stepped-up mobilization of public resources and effectively targeted public funding. Making the choices explicit and presenting a case to the Ministry of Finance will almost always require a longer term sector development plan with realistic financial projections and a medium term expenditure framework. Many countries have made considerable progress with the development of detailed financial and action plans for primary education. But often this has been done without considering the implications for secondary education or the trade-offs in public expenditure allocations that will be necessary to reach sub-sector education development objectives in a balanced way. Involving the Ministry of Finance in the planning process is probably the most effective way to deal with funding and resource allocation issues so that realistic resource allocations for the totality of the education sector can be incorporated in the national medium term expenditure framework and poverty reduction strategy plans.

Sub-Saharan Africa faces the challenge to develop a strategy for secondary development that fits the particular conditions of its current development context. Such a strategy will have to be one that is parsimonious in resource use, recognizes the bottom-up sequential nature of education development, is closely aligned with national development priorities, anticipates labor market demand, strengthens school autonomy, ensures effective central direction and supports and builds public-private partnerships reflecting relative competence for action. It will prioritize the expansion of lower secondary education and the development of opportunities for further education and training in response to the demands of economic growth. It also implies an evolving role of the government towards policy formulation, setting of standards and monitoring of progress towards national goals as well as the provision of funding to support a broad based, equitable expansion of secondary education with incentives for private provision and subsidies to disadvantaged students to ensure equality of opportunity.

Implementing change along these lines will require capacity development throughout the system, effective management information system and most importantly a long lasting political commitment and leadership. Such a commitment is a commitment to provide the essential resources but also a commitment to build broad public support for a reform agenda. Only then will it be possible to tackle the challenge of secondary education with confidence.