

# Biennale on Education in Africa (Maputo, Mozambique, May, 5-9 2008)

# Beyond Primary Education: Challenges and Approaches to Expanding Learning Opportunities in Africa

# **Parallel Session 4A**

Extending Basic Education, Expanding Secondary Education: Governance and Policy Issues

Accelerating the Expansion of Access to Secondary Education: The 1980 – 1990 Experience in Zimbabwe

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Working Document DRAFT

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### **Acronyms**

CDU Curriculum Development Unit

IIEP UNESCO International Institute for Educational Planning

MOE Ministry of Education

NGO Non-Governmental Organization

SIDA Swedish International Development Agency

UNESCO United Nations Education, Science and Culture Organization

UNICEF United Nations Children's Fund

USAID United States Agency for International Development

ZIMFEP Zimbabwe Foundation for Education with Production

ZIMSCI Zimbabwe Science

ZINTEC Zimbabwe Integrated National Teacher Education Course

31 October 2007

### **ADEA Biennale, Maputo 2008**

# Accelerating the Expansion of Access to Secondary Education: the 1980 – 1990 Experience in Zimbabwe

by Fay Chung

#### 1. The Inherited Education System and Overall Socio-Economic Situation

The Lancaster House Agreement brought Independence to Zimbabwe in 1980. Before Independence only a third of black children were able to access primary education, and less than 4% of the age group were able to gain secondary education. As a result of this policy Zimbabwe only had 80 000 people who had had three years of secondary education out of a total of 7.5 million inhabitants in 1980, that is only 2.1% of the adult population had enjoyed secondary education. Many of these had managed to gain secondary education through private sector distance education courses. Tertiary education within the country was limited in such a way that black students never outnumbered white students, although the white population comprised at its highest less than 4% of the population.

Zimbabwe had about 4000 graduates at Independence, most of them educated in neighbouring countries and overseas. That gave Zimbabwe a figure of 0.1% of its adult population having enjoyed university education. There was a consensus amongst blacks that educational deprivation was one of the worst forms of colonial oppression.

For whites as well, education remained a key area. The Lancaster House Constitution provided an apparently "win-win" situation in that blacks would be able to gain control over more and better education, whilst whites were also able to retain control over the education of their children.

Zimbabwe inherited two education systems: one known as the European Education system, for Whites, Coloureds and Asians; and a second one known as the African Education system, for blacks. The two systems enjoyed different curricula, teacher training, certification, and funding. For example the per capita cost of the European Education system was nine times more than for the African Education system. The State took responsibility for constructing schools mainly for the European Education system, and for urban African Education schools. Less than 30% of the population lived in urban areas, as a strict system of pass laws did not allow unemployed blacks, and even the wives and children of employed blacks, to enter cities. Most black workers were housed in hostels, which provided dormitory accommodation. The rural areas were catered for by mission schools, but in 1968, the then Government decided to stop the expansion of mission schools, as part of their curbing of educational expansion for black children. Instead they decided that schools in rural areas could only be established by the parents themselves. At the time, most parents were poorly educated, so the majority were not able to establish and fund their own schools. However, a small number of ambitious and better educated parents were able to establish schools for their children. This small number were able to access State subsidies, such as teachers' pay and per capita grants for registered schools.

One of the first challenges was to unite the two racially divided education systems into one system. This was achieved very effectively within a few years. This included developing a unitary curriculum: this challenge was taken up immediately after Independence, syllabuses were united by 1983, and new textbooks became gradually available by 1987. Urban government schools were racially integrated by 1981 through the simple procedure of removing the property ownership rule

which allowed only "property owners" to send their children to Group A or former white schools, and replacing this by a residential rule. This allowed lower income blacks to send their children to these schools. The zoning system which allowed children resident within the zone to attend certain schools was changed so that "black" residential areas, formerly known as "townships" now became zoned together with "white" residential areas. Also the changes in property ownership regulations now allowed blacks to purchase and own property in urban areas.

The racially divided education system reflected a racially divided economy, with the majority of blacks dependent on the traditional peasant based subsistence economy, whilst whites benefited from modern commercial farming, mining and a certain level of industrialization. Unifying the education system did not remove the fact that the two economic systems existed side by side.

#### 2. Review of Macro Policy Framework

Zimbabwe's education policies, incorporated into the Education Acts of 1982 and 1987, guaranteed the abolition of all forms of racial discrimination in education; the creation of a unitary national education system; the abolition of primary school tuition fees as a way of introducing free and compulsory primary education; the use of the mother tongue in the first three years of education; the affirmation of English as the international language to be taught from Grade 1 and throughout the education system; the decentralization of the management and administration of the education system to promote efficiency and equity in the development of the regions; expansion of teacher education so as to release more trained teachers into the school system, and reduce the use of expatriates and of untrained and under-qualified teachers; and the discouragement of the establishment of boarding schools in favour of days schools that are less restrictive in terms of enrolment and are cheaper to construct, operate and maintain.<sup>1</sup>

Education was seen as the main tool for political, social and economic development. This was expressed in the first and subsequent development plans. In the first policy statement made immediately after Independence, *Growth with Equity*, this is clearly stated:

The central and pervasive role of education is of paramount and decisive importance in the formation and enhancement of human resources and in the social and economic development of the country. Education is a human right and a basic human need. It will enable Zimbabweans to acquire a broad base of knowledge which will influence their attitudes, values and skills and on which they can build in later life....

Government's view that education is a central and pervasive element in human resources, social and economic development implies that –

- (a) education must cover a wide spectrum with both the content and form adopted responding to the imperatives of excellence and relevance, i.e., high standards and quality, as anywhere else in the world, yet at the same time imbued with local values and combined with practical knowledge of concrete conditions:
- (b) investment in education be rationally planned and fully integrated with investment in other socioeconomic activities in the public and private sectors so that the outputs of the system can become involved in productive economic activities in a growing and expanding economy:
- (c) education is an important Government instrument for achieving equity; this means relatively more educational opportunities should be created in rural areas where an increase in the general level of

Zimbabwe National Commission for UNESCO, the Ministry of Education, Sports and Culture, and the Ministry of Higher Education and Technology, (2001) "The Developments In Education: The Education System at the End of the 20th Century 1990-2000" National Report of the Republic of Zimbabwe, prepared by the Zimbabwe National Commission for Unesco, the Ministry o Education, Sport and Culture and the Ministry Of Higher Education and Technology. Harare. Available http://www.ibe.unesco.org/International/ICE/natrap/Zimbabwe.pdf

education will contribute to more rapid adoption of improved agricultural methods and higher productivity of the rural people. <sup>2</sup>

Education was perceived as a major instrument for socio-economic transformation spearheading the appreciation of the dignity of labour through education with production and the adaptability of education to technological change. The curriculum should be made relevant to the national socio-economic objectives, cultural ethos and intellectual and skills needs of Zimbabwe. To that end, education would closely be linked to the productive activities and national human resource requirements. The education system would provide the skilled personnel requirements of all sectors of the economy. In this regard *Growth with Equity* envisages an "expansion of the secondary schools which will provide well educated young men and women to meet the future manpower needs in the skilled trades and professions."

A number of other areas are covered in the document including "Government's conviction that there is a vital need for local participation in the provision of school facilities if essential expansion is to be achieved..."; there is "need to reduce unit costs of education"; and finally that "the educational system can play (an important role) in the rehabilitation of refugees and former combatants..."

The policy was to ensure that education was not only quantitatively improved but also qualitatively improved and cost-effective. This was essential because such a massive expansion of the education system could lead to the deprivation of investment into other essential sectors, for example investment into economic growth. At the same time education should be available to hitherto disadvantaged groups, such as those living in rural areas. The education system should be adapted to suit local conditions. Science and technical subjects should be expanded in secondary schools to address skills gaps in the country.

Whilst secondary education was not made compulsory, every primary school leaver whose parents could afford the fees had to be accommodated at secondary school level. The Grade 7 Examination which had been used to exclude most children from secondary education was retained as a diagnostic tool.

#### 3. Innovative Policy Implementation

In order to undertake such a massive expansion of the education system, it was essential to think "outside the box", that is, whilst not destroying the heritage of the settler-colonial education system, with its strengths and weaknesses, to work out ways to provide good quality primary education for all and secondary education for the majority. This section will cover the following areas: 3.1. the process of planning and registration - categories of schools, private schools, elite schools; 3.2. the involvement of the parents and community; 3.3. school construction; 3.4. innovative curriculum development; and 3.5. teacher education.

### 3.1 The Process of Planning and School Registration

After Independence, the Ministry of Education decided to limit the expansion of government schools, whilst allowing the expansion of schools owned by the local community. These were originally under the auspices of the District Councils, later known as Rural District Councils. The reasons for this decision included the limited State budget for education, which was not sufficient to cater for a high cost school expansion system. State schools, particularly those that had catered for

Ibid., pp. 11 – 12.

Government of the Republic of Zimbabwe, *Growth with Equity, an Economic Policy Statement*, February, 1981, p. 11.

<sup>&</sup>lt;sup>3</sup> Ibid., p. 11.

European education, were extremely expensive, even wasteful. Even more important, the participation of parents and communities enabled them to mould the school to fit their own needs. With such a diverse population, there was need to enable the education system to adapt to the needs of the different communities.

The post-Independence school construction and development program empowered local communities in ways that they had not experienced before. A major adjustment of the inherited system was that parents and communities would now receive technical assistance as well as subsidies for school construction. Teachers would be paid by the State which would also pay a per capita grant for each pupil to cover administrative costs and the cost of teaching and learning materials. A result of this policy was that by 1990 only 6.2% of primary schools and 12.7% of secondary schools in Zimbabwe were government schools. The rest are termed "private schools", although they were not profit making, and received large subsidies from the State.

However the Ministry of Education decided to construct a government secondary school in every district. This was a political move to demonstrate that the new Government would provide secondary education in areas which had not benefited from State provision in the past.

The decision to expand access to secondary education meant that it was essential to lower the unit cost to affordable levels, and since boarding education cost between five to eight times more than day education in terms of both capital and recurrent costs, the emphasis on day secondary schools was pragmatic. However existing boarding schools were allowed to continue. A small number of government boarding secondary schools were permitted, catering for students who had been in exile during the war years, but these schools were not constructed by Government itself, but by a non-governmental organization known as the Zimbabwe Foundation for Education with Production (ZIMFEP) which had been formed specifically to cater for the education and training of war veterans and refugees. By 1990 boarders comprised only 8.5% of the total secondary school enrolment, as compared to 20.3% in 1984.<sup>5</sup>

The Ministry of Education inherited a very small Planning Department as there had been little expansion in the past, with an average of one new school being built each year. Suddenly the Ministry was planning expansion that would include an increase of more than 2000 primary schools and more than 1300 secondary schools within a few years. The existing system and staff could not cope with such a massive task. It was difficult to persuade the Public Service Commission to create new posts for planning and building officers. In the final analysis the creation of these posts took more than 3 years. Moreover, there were also few people who had been specifically trained to do these jobs. Yet, there was need to make and implement plans with immediate effect. Since the Ministry had the power to create teacher posts, it was decided to create the posts of seven planning officers and seven building officers at teacher level. These would be responsible for planning and school construction within the country's nine Regions. The Planning department expanded from 5 officers to 21 officers.

As it was impossible to find fully qualified planning and building officers, the strategy was to appoint the best qualified teachers and to train them through a combination of in-service training and study leave. Planning officers were selected from a variety of disciplines, but they generally had a Masters degree in education or a related field. Building officers were recruited from technical subject teachers who had a Certificate in Education. The average age of the new team was about 28.

<sup>&</sup>lt;sup>5</sup> Earlier *Annual Reports of the Secretary for Education* do not give information on number of boarders at secondary school level.

The Ministry of Education began with a school mapping exercise. The UNESCO International Institute for Education Planning (IIEP) had organized a school mapping course in Tanzania just at that time, and they agreed to allow two Zimbabwean educational planners to participate in this course. This basic training provided the Ministry of Education with the knowhow regarding school mapping, as the two officers were able to provide the training to their colleagues. Meanwhile the Ministry also organized a three-week course to train the building officers on the basic principles and skills to enable them to undertake their immediate tasks. Whilst both of these courses were brief, they were sufficient to allow the immediate work to be carried out. However all the officers were later to be provided with training opportunities which led to Masters and Doctoral level studies.

The first task was to locate the existing schools and children. The Ministry did not have this data on hand. The plan was to enable every child to be within 5 kilometres of a primary school, and to provide a secondary school for every five primary schools. This secondary school would initially be located at one of the five primary schools as an "upper top": this term was invented to describe a primary school which would initially host the first two years of secondary schooling through double sessioning its existing classrooms, but with the intention of allowing a separate secondary school to be constructed within the vicinity. Thus the "upper top" had to be centrally located, and accessible to the other schools in the cluster. With the assistance of the Ministry's Regional and District Offices, most of which had just been established, and with a lot of support from parents and communities, it was possible to gather sufficient data on existing schools and the number of children of different ages who required schooling. Parents and communities eagerly gave in the names and ages of their children. Within a period of 15 months, a large part of the school mapping had been undertaken.

Once communities had satisfied the Ministry that they had sufficient children to register a minimum of 80 children for each year group, the Ministry allowed a "provisional registration". Provisional registration allowed the school to have teachers appointed and for the school to enjoy a per capita grant, at that time equivalent to between US\$1-2 per child per annum. Thus schools were allowed to start in temporary buildings such as bamboo, grass and mud structures, and even under trees. The idea was that permanent structures would be constructed, mainly be the parents and community, within a period of five years.

Initially the new secondary schools catered only for the first four years within a six year secondary school system. The first four years enabled students to do the "O" or ordinary level examinations of the Cambridge University Examinations Syndicate. Based on the examination results, the best students nationwide were selected to enter the "A" or advanced level, which would qualify them to enroll at university and other higher education institutions. Thus although entry into lower secondary education was non-selective<sup>6</sup>, once they had completed their "O" levels, the system became highly selective. In 1989 only 2.8% of those who entered for the "O" levels examinations were accepted into "A" levels: in actual figures, 166 647 students entered for the "O" Levels examinations in 1989, and only 4 628 of them were able to enter "A" levels in 1990. The selection system included student choice of "A" level schools, the selection of the top male and female candidates separately, and a final meeting of "A" level school principals. Initially it was possible for girls to enter "A" levels with lower qualifications than boys, but this evened up later.

The fierce competition to enter "A" levels led to parents and communities demanding the upgrading of their secondary schools to "high schools". The Ministry's strategy was to allow them to upgrade their own schools by setting the standards required for registering a "high school", including the

However, it is to be noted that elite secondary schools utilized the Grade 7 examinations to select the best students. Some schools developed their own stringent selection systems.

installation of electricity, laboratories, a library, boarding facilities, as well as the employment of at least nine university graduates. A substantial number of communities were able to upgrade their schools in this way, with the possibility of accessing State grants at various stages of the improvement. This partnership has enabled communities to fulfil their ambitions to upgrade the quality of their schools. In 1980 there were 58 "A" level schools. By 1990 this had risen to 106.<sup>7</sup>

#### 3.2 School Construction

There were a number of different systems of school construction. Government schools were constructed by the Ministry of Construction utilizing private contractors. Responsible Authorities for "private schools", which included mission schools, elite schools known as "Independent Schools", community schools, district council schools, and farm schools, were eligible for State subsidies for construction. Under the scheme Government would share responsibility with parents and community through a partnership which would involve each side in undertaking certain responsibilities. The responsibilities of the parents and community were as follows:

- Parents and community would build the actual school infrastructure, whilst Government provided plans, technical assistance and grants.
- Parents would participate in ensuring that their children attended school and they would also participate in the running of their schools.
- Parents would pay fees at a level to be decided by the parents themselves, as a way of supplementing state provision. Such fees would be controlled by the parents themselves, and could cover construction, furniture, learning materials, and the payment of additional teachers if the community deemed the Government allocation to be insufficient.

The responsibilities of Government were as follows:

- To provide a suitable plan and technical support to ensure that school buildings were of a
  reasonable standard which guaranteed student safety and health. The siting of such schools
  would be done by the Ministry of Education, in collaboration with the Ministries in charge
  of physical planning and health, and including a locally elected official.
- To provide a building subsidy. Access to future subsidies was based on successful utilization of earlier subsidies.
- To provide and to pay for teachers at the fixed teacher pupil ratio of 1 teacher for every 30 pupils for the first four years of secondary education, and 1:20 for the last two years.
- To pay a per capita grant to the school for teaching and learning materials. The school was allowed to purchase what it needed commercially. This grant gave more to rural schools than to urban schools.
- MOE also provided some free materials and in-service training courses for teachers and school heads.

This sharing of responsibilities proved to be the secret of success: parents and communities who had been deprived of schooling for a century, responded very enthusiastically, far beyond what had initially been expected. In a very short period of time, the number of secondary schools expanded from 197 in 1980 to 1 512 by 1990, the majority of them built by parents themselves. Enrolments increased from 66 215 to 695 882 during the same period.

Information from the Ministry of Education Planning Department. The system of allowing secondary schools to upgrade themselves, albeit with the assistance of State subsidies, has proved to be highly effective. By 2000 there were 189 "A" level schools; by 2005 there were 604; and by 2006 there were 639.

School construction subsidies for local communities were sufficient for the purchase of building materials such as roofing, cement, door and window frames, whereas the parents and communities were able to provide local materials such as sand and bricks. They could also provide free labour for the construction of the school. Technical assistance included the provision of standard architectural plans; the siting of schools; and the regular visit by the building officer to assist in advising and improving building standards. Subsidies were provided in three tranches: an initial grant of 70% of the grant on signature of the agreement; 20% on satisfactory inspection at "window level", and the final 10% on completion. The initial grant was for 4 classrooms and toilets. Successful completion of this first phase qualified the community to enter the second phase: thus entering each new phase was dependent on successful completion of the previous phase. This system was found to be largely successful for 96% of communities, but for the poorest and worst organized communities, this did not work.

One of the reasons for the successful construction of so many schools was the existence of several different models for school construction. For some communities, it was more effective to provide a private sector constructed shelter which included metal or concrete pillars, a cement floor and roofing. There were a number of companies which provided such shelters, previously mainly catering for low cost storage space for commercial farmers. Such shelters were sturdy and safe, and could be put up in a day or two, following a "meccano" set system. The local community was then required to "fill in", that is to construct the walls between the pillars and put in windows and doors. Many communities found this system more amenable to their needs. Middle class communities were able to employ architects to design their schools and to employ contractors, whilst still enjoying the State subsidies. They were thus able to deviate from the standard plans available to everyone.

An important change was that for the first time the State was able to utilize small scale building contractors who traditionally were not able to enjoy Government contracts. As a result they did not have a track record by which their performance could be judged. Nor did they have the capital to buy the materials or the facility to obtain bank loans. The Ministry of Education began by providing "labour only" contracts, with the Ministry providing the sand, bricks, cement, etc. Through this system, many of these small contractors were able to graduate to becoming independent large contractors.

Commercial farmers, most of whom were whites during this period, were encouraged to construct schools for their workers. They would enjoy a tax rebate as well as State subsidies. This also applied to industrial and commercial companies and mines. These sections of the private sector responded well to the Government incentives, and many of them established primary and secondary schools.

Another model was the utilization of NGOs to construct schools. A number of local and international NGOs participated.

Careful attention to location was extremely important as location would benefit certain groups and not others. It was essential to build up consensus on location following transparent indicators which everyone accepted, such as the location being in a population centre accessible to all pupils, with a water supply, etc. This consensus was important to win the support of the whole community. Moreover, once a site was selected, it would enjoy a high investment from the State and from the local community, and it was important that this investment should be optimal.

#### 3.3 Innovative Curriculum Development

It was important not only to expand the education system, but also to transform the curriculum, interpreted as everything that is taught and learnt in a school. The inherited curriculum provided an international standard of education for the European education system, based on the British curriculum, utilizing British and American textbooks, and British examinations. It was preparing students either to become the ruling class in the country, or to fit in successfully in their home country, Britain. For the African education system, the curriculum provided a basic primary education intended to enable workers to follow orders in English, and to be sufficiently numerate to work at the lower levels in factories and commercial enterprises. The 4% allowed to enjoy secondary education were groomed to be an elite who could serve in the settler colonial bureaucracy, as well as provide medical and educational services to their own communities. Career prospects were limited for blacks: most could work only as teachers and nurses. Technical education was severely limited for blacks, in order not to allow them to compete with white artisans: as a result blacks were allowed to have a lower technical vocational education in a category of schools known as F2 schools. They were also trained in special technical vocational institutions requiring primary education as an entry requirement.

As secondary education was now going to be available to the majority, it was essential to move away from seeing secondary education as only a preparation for university and tertiary education, and to see it instead as a terminal level of education for the majority of students. Zimbabwe was moving towards secondary education for all, although initially it was only for those who could afford it, albeit at a low fee by international standards.

The Curriculum Development Unit (CDU) was the Ministry department responsible for leading and implementing curriculum change. CDU was divided into small teams which worked on a full time basis, but curricular decisions were made by a Subject Panel, which consisted of representatives from universities, teacher education, education officers, the teachers' association, subject specialist associations, and private enterprise for technical and vocational subjects. Subject Panels were the final arbiters of what would be taught in schools.

Individual schools and organizations were also able to develop their own curriculum: these were presented to the CDU for approval. A number of organizations such as the Cambridge University Examinations Syndicate, some church schools and the Zimbabwe Foundation for Education with Production (ZIMFEP) developed their own syllabuses.

Secondary school subjects for the first four years of secondary education were divided into five groups: *Group 1*, *Languages*<sup>8</sup>; *Group 2*, *Sciences*: Core Science is compulsory, and is supported by the ZIMSCI program<sup>9</sup>; *Group 3*, *Mathematics*<sup>10</sup>; *Group 4*, *Human and Social Sciences* including Geography, History, Religious and Moral Science, Bible Knowledge/ Divinity, and Development Studies; and *Group 5*, *Practical*, *Technical*, *Business and Commercial Subjects* including Technical Graphics; Metal Work; Wood Work; Fashion and Fabrics; Food and

Modern Languages are available, but only in more established and privileged schools. They include Afrikaans, Portuguese and French. Teachers are trained to teacher Portuguese and French with support from the Portuguese and French Governments at Hillside Teachers' College. Secondary schools can self select to teach these subjects.

In order to provide for students who are also targeting university education, the Ministry developed a curriculum known as Extended Science. In addition schools are also able to utilize syllabuses originally developed through the Cambridge University Examination Syndicate such as Chemistry; Physics; Biology; Computer Studies; Physical Education; and Combined Science.

There are two mathematics syllabuses, one of which is more elementary.

Nutrition; Home Management; Agriculture; Art and Craft; Music; Principles of Accounts; Commerce; Economics; Typewriting; Business Studies; Book Keeping; Shorthand; and Computer Studies. In order to make it practicable to teach Group 5 subjects, CDU developed Practical Subject Kits.

The rubric for secondary schools is that students have to have subjects taken from each of the five groups. There are a number of compulsory subjects, comprising English; one of the two main African Languages, Ndebele or Shona for the first two years of secondary education; mathematics; and Core Science. In addition students had to do at least one subject from Group 4 and two subjects from Group 5. Some forty subjects are offered in the curriculum, but in general schools limit the number of subjects taken by students to about seven. This is particularly true of the newly established schools: such schools generally offered the compulsory subjects, plus History, Geography, and two practical subjects from Group 5.

#### 3.3.1 Innovative Approaches

Innovative approaches were essential if subjects covered in these 5 Groups were to be taught effectively. The following innovations were put into place:

- **3.3.1.1 The use of distance education methodologies** for all subjects, such that the textbooks could be used by under-qualified teachers as well as by students for self-instruction. All CDU staff underwent a one month training course run by the Cambridge Extension College to train them to utilize distance education modalities in their textbooks.
- 3.3.1.2 The development and provision of ZIMSCI kits to enable students to perform an experiment each week over the four year course, even though most of the new secondary schools did not have either electricity or laboratories. The ZIMSCI kit was born in the private sector before Independence: because the settler colonial government actively prevented black students from obtaining a secondary education, a distance education private sector emerged, providing secondary education to as many students as the formal sector. One of the colleges developed a science kit to enable its students to carry out experiments at home. This program was developed by a university lecturer, Alan Dock. At Independence CDU decided to utilize this system for all secondary schools, and Alan Dock was seconded from the University of Zimbabwe to CDU, and with a small team of practicing science teachers, expanded the program to include packaged experiments and lessons for the first four years of secondary education.

Instead of utilizing expensive and breakable materials like Bunsen burners and glass test tubes, the program used locally manufactured tins and small methylated burners. The idea was that every pupil, working in pairs or small groups, would perform an experiment each week, with the equipment and materials provided for and suitably packaged in the kit. Students learnt by carrying out the experiments according to instructions in their distance education modules, and then writing up a description of what they had observed.

The ZIMSCI curriculum, known as Core Science, was examined by the Cambridge University Examinations Syndicate. The curriculum emphasized a scientific approach to problem solving, and concentrated on areas of knowledge that were essential for everyone in Zimbabwe such as Agricultural Science; Health Science and Biology; Science used in Zimbabwe's industries; and Mechanics.

One of the challenges in expanding science and technology education was the lack of suitably qualified teachers. Under the settler colonial system, most teachers were trained to

teach either an African Language or Religion: few were trained to teach secondary school level science and technology. The challenge was to provide in-service training for such teachers. Moreover there were adequate numbers of students who had completed six years of high school, and these could also be in-serviced to teach science and technology. Thus, a strong in-service training course accompanied the provision of the kit. In-service courses were held two or three times a year, for periods of 2-3 weeks during the school holidays. In addition a weekly radio program was devised to support these teachers. The ZIMSCI program provided a teacher's manual as well as student manuals, so that teachers could gain more in-depth knowledge. Schools were provided with audio tapes and recorders which teachers could use for complex lessons. These tape recorders were a bright purple and yellow with huge labels to identify them as part of the ZIMSCI kit: this did succeed in making abuse and theft less likely!

One of the dangers and challenges was that the ZIMSCI approach would be seen as a second class and inferior type of science education. The fact that the ZIMSCI kit cost only US\$1 000 in contrast with the average cost of US\$40 000 for a laboratory added to this impression. However, when the most elite schools began to utilize the kit as a superior form of teaching and learning, the ZIMSCI approach was accepted even by the usually conservative Zimbabwean educational establishment as a sound and prestigious program. Elite schools were allowed to purchase these kits. This was an important victory, as education bestows both status and knowledge. Even when you have an excellent program such as ZIMSCI, if it is perceived as an inferior product, it may be rejected even by those who can benefit from it.

**3.3.1.3 Practical Subject kits** covering a wide range of technical and commercial subjects were also developed and provided to schools. Unlike the procedures for the ZIMSCI kits which were provided free of charge to most schools, schools had to apply for practical and technical subject kits, and had to pay for them. The price was about one fifth of the commercial price, so it was heavily subsidized. The Ministry of Education established a special revolving account to receive payments from schools.

Kits were developed for Technical Graphics; Metal Work; Wood Work; Fashion and Fabrics; Food and Nutrition; Home Management; Agriculture; and Art and Craft. Poorer schools generally selected two to four of these kits. Each kit was designed to enable the subject to be taught through practical use of hand tools and instruments. For example the Agriculture kit comprised implements needed on a small farm, including two oxen drawn ploughs.<sup>11</sup>

The practical subject kits provided schools with the opportunity to teach at least two practical subjects at secondary school level. Whilst this did not provide a high level of technical competence, it did provide a good orientation to modern technology. It must be noted that the majority of students in Zimbabwe came from a peasant background, where there had been little access to modern equipment and technology. Thus the secondary school provided an opportunity for students to be introduced to new technologies and hand tools which they would not normally meet in their home environment.

**3.3.1.4 National Foundation Courses.** In addition a small number of better staffed and better equipped schools were able to offer a higher level of technical and vocational training. This

Some educationalists demanded tractors, but these were never included in the kits.

enabled students to pursue technical and vocational training at a more professional level. Subjects offered at this level included Metalwork Engineering; Technical Graphics; Typing; Cabinet Making; and Ornamental Horticulture.

- 3.3.1.5 Changes in the Social Studies Curriculum. One of the most important areas of work was in the interpretation of history and social studies as a whole. The African Education curriculum had provided an interpretation of history which justified colonization as a natural form of the survival of the fittest, a form of social Darwinism popular in the pre-Second World War period, and still characteristic of the inherited curriculum. Instead the new secondary school history curriculum was built on a foundation of African history and world history, with emphasis on Zimbabwean history. However, the rubric did not make history compulsory, so schools which did not like the African orientation of the new curriculum, such as the elite schools, tended to avoid this subject. The majority of secondary schools offered history.
- **3.3.1.6 The Introduction of HIV/AIDS Education.** By the late 1980s, it was clear that the HIV/AIDS scourge would become very serious, and it was decided to introduce the subject into all levels of schooling from Grade 3 up till university level, including for parents and community. This program was supported by UNICEF, and an excellent set of textbooks and other teaching/learning materials were developed. However, it was difficult to persuade teachers to tackle this topic, as most teachers believed that their responsibility was to teach academic subjects which were examinable. Subjects which were compulsory, but did not comprise part of the examination system, such as Education for Living, which incorporated HIV/AIDS education, were seriously disliked by teachers.
- 3.3.1.7 The Provision of Free Textbooks was another approach. In general schools were expected to purchase their own textbooks from the private sector through utilization of their per capita grants augmented by payment of fees. However, although the private sector textbook distribution system was efficient, poorer schools sometimes found that they could not afford textbooks. The Ministry printed textbooks utilizing the cheapest paper and the most cost-effective printing systems. As a result free textbooks were printed on newsprint, in black and white, and secured with a staple. This method enabled textbooks to be printed at as low as US20 cents per copy. Every school received 20 copies of every book published by CDU which published over 5 million copies a year. This system complemented the book purchase system.
- **3.3.1.8 State Collaboration with the Private Sector in Textbook Development and Publication.**There was close collaboration in textbook development and publication between the State and the private sector. A large percentage of the textbooks were developed by the Curriculum Development Unit. Once they had been developed, they were given to one or more private sector publishers for publication. By working together, it was possible to develop textbooks which were of a reasonable price which could cater for ordinary schools as well as elite schools.

Private sector publishers took the initiative to produce textbooks independently, in competition with the Ministry text and with each other. Sometimes there were as many as six different textbooks for the same subject and the same level for schools to choose from. The system developed was that publishers would, on their own initiative, decide to develop a textbook. On completion they submitted the text to CDU and paid a "reading fee". CDU had organized a list of "readers" for each subject area, drawn mainly from their Subject Panels, and two readers would separately evaluate and comment on the text. These readers sign an affidavit that they do not have an interest in any rival publication. The publisher

would then incorporate improvements, and the Ministry would certify that the book is an approved school textbook for the next five years.

Another approach was when the Ministry agreed to purchase say 5000 copies from a publisher before publication. The publisher would then be free to sell the remaining copies. This approach was a way of providing a subsidy to the publisher, and was generally used for the publication of textbooks in African languages, particularly minority languages. Such textbooks tended not to be profitable, because the clientele was so small.

- **3.3.1.9 Tree Planting and Tree Care Program**. The Ministry of Education established a tree planting and tree care program in all schools. The aim of the program was to improve the environment and incorporate the knowledge and skills required for trees to flourish in all schools and all learners. The steps taken to establish this program included the following:
  - There are more than 120 District Education Officers (DEOs), responsible for supervising about 24 primary schools. These officers received in-service training for five days on how to plant and care for trees. This was largely a hands-on training program. They in turn could train personnel in their schools.
  - A manual was developed on how to plant and care for trees.
  - Schools were encouraged to develop their capacity to become nurseries for seedlings which were provided free of charge by the Forestry Commission.
  - A Tree Planting and Tree Care competition was set up under each District Education Officer for the schools under his or her control. Each DEO would give out five prizes a year: for the best tree nursery; the best woodlot for trees for firewood (mostly non-indigenous fast growing trees); the best indigenous trees; the best fruit trees; and the most beautiful ornamental garden. Prizes comprised certificates for the winning schools and substantive prizes such as boreholes and wheel barrows. Under this system, every school could win a prize every five years.
  - Successful participation in the program enabled school heads and teachers to gain points that will improve their promotion prospects.

This was one of the most innovative and successful curricular programs in Zimbabwe and has now been continuing for more than twenty years.

#### 3.4 The Quality and Availability of Teachers

Highly motivated and dedicated teachers are essential if the education is to be qualitative. It was important to win the support of the teachers for the expansion: they would be heavily involved as school leaders, as community leaders, and as teachers. It was also essential to expand, reform and improve the teacher education system. As the Government had decided on a more scientific and technological approach to education, this would require a large scale re-orientation and additional training for virtually all teachers. This section will include the following: 3.5.1. The Teachers' Associations: 3.5.2. The Availability of Qualified Teachers in the System; 3.5.3. Teacher Education, including the Zimbabwe Integrated National Teacher Education Course (ZINTEC) and . Technical Teacher Education; 3.5.4. The Gender Gap; 3.5.5 Teachers' Magazine; and 3.5.6. Conclusions.

#### 3.4.1 Teachers' Associations

Zimbabwe was fortunate in having a strong teachers' association, the Zimbabwe Teachers' Association (ZIMTA), which was not only a teachers' union but also a professional association. In ZIMTA was heavily involved in dialogue with the Ministry of Education regarding salaries, policies, and curriculum development. A two day meeting was held between ZIMTA and the Ministry of Education three times a year to sort out problems and discuss new initiatives. Secondary school heads have their own association, the National Association of Secondary Heads (NASH), which participated regularly in dialogue with the Ministry of Education. In addition there were a number of Subject Associations, comprising specialist teachers, for example in Mathematics, Science, English, African Languages, and Technical Subjects. These associations played a critical role not only in mobilizing teachers to support the new education policies, but also in providing opportunities for teachers to upgrade and update themselves academically and professionally. In addition these associations provided teacher representatives in the Curriculum Development Subject Panels which were responsible for deciding on the curriculum and textbooks used in the schools.

ZIMTA provided training programmes for its members, in association with a number of overseas Teachers' Associations, such as the Canadian Teachers' Federation, the Finnish Teachers' Association, and the Swedish Teachers' Union. They were able to run regular courses for their teachers to improve the quality of classroom teaching in various subjects and to improve the quality of school administration, particularly in the newly created "upper tops". A special programme was held to improve Women's Leadership, specifically targeted at women teachers becoming both school and community leaders. Another important innovation was that of Study Circles, along the Swedish model, which enabled members to utilize the pamphlets and other teaching/learning materials produced by ZIMTA to improve themselves both academically and professionally. ZIMTA study circles could also be established to study other areas of interest to teachers.

#### 3.4.2 The Availability of Qualified Teachers in the System

The transformation of the secondary education system from a very tiny elitist system to a mass education system necessarily entailed a huge expansion of the teaching service. In 1980, there were only 3 730 secondary school teachers, 97% of whom were qualified. By 1990 there was a seven fold increase, with secondary school teachers numbering 27 332, and only 48.1% of them were qualified. Whilst the number of qualified teachers within the secondary education system increased from 3 618 in 1980 to 13 144 in 1990, a more than three-fold increase, this was not sufficient to cope with the requirements. A new phenomenon was the introduction of student teachers on longer term teaching practice, serving as full time teachers. They comprised between 7-10% of the teaching force. About 40% of the teachers were unqualified.

Adjustments had to be made for the fact that now more than half the teachers were not fully qualified. These adjustments included the "Zintecization" of the teacher training which now meant that student teachers spent at least a full year of their training within the school; the running of inservice training courses for under-qualified teachers three times a year during the school holidays; the institutionalization of weekly radio training programs for specific courses, such as the ZIMSCI course; and the institutionalization of a high degree of distance education in the textbooks. In addition the teacher deployment system was adjusted so that no school had fewer than three qualified teachers: a language and humanities teachers; a mathematics and science teacher; and a practical subject teacher. These qualified teachers would be assisted by the underqualified teachers. The underqualified teachers comprised primary school teachers who were now serving in "upper tops". Unqualified teachers were mainly school leavers who had passed "O" and "A" levels.

A second teachers' union was formed in the late 1990s.

#### 3.4.3 Teacher Education

In order to expand and reform the education system, it was necessary to expand and reform the teacher education system. The inherited teacher education system was racially divided. All of these colleges accepted students who had passed the "O" level examination after eleven years of schooling, and they followed three years of full time residential study. All teacher training courses were certificated by the University of Zimbabwe, under its Associate College program. Primary and secondary teachers with a University Certificate of Education received the same status and pay.

The University of Zimbabwe, the only university at the time of Independence, trained teachers at degree and post-graduate levels. The students who had obtained a Certificate of Education could upgrade their qualifications to the Bachelor of Education course through either full-time or part-time study.

The radical expansion of primary and secondary education planned by the new Government needed a much larger output of trained teachers which the existing colleges could not produce. There was also need to review the courses in line with the new vision and policies. Moreover the Liberation Movements had been running their own school systems in Mozambique and Zambia during the years of the war, and they had developed their own systems and curricula. The new Government felt it was important to integrate these experiences into the education system of the newly liberated Zimbabwe. It was in this situation that the Zimbabwe Integrated Teacher Education Course (ZINTEC) was born.

#### 3.5.3.1 The Zimbabwe Integrated National Teacher Education Course (ZINTEC)

ZINTEC was established soon after Independence, initially to train an additional 9000 primary school teachers. It had such a powerful influence on the education system that it transformed the whole teacher education system, including that for secondary education. Although its establishment was fiercely opposed by the settler colonial officials who were still in control of the Ministry of Education, it was enthusiastically supported by UNICEF, and a number of other donors and foundations. The Ministry bureaucracy insisted that it was not possible to begin any new programs, as there were no funds for planning or staffing. It was under these inauspicious conditions that ZINTEC started.

ZINTEC was based on the teacher education program that was being run in Mozambique between 1978 and 1980. This program had trained some 600 teachers who were responsible for teaching in nine schools for Zimbabwean refugee children in Mozambique. The principle behind ZINTEC was that it was essential to enroll all eligible age children in primary school immediately. It was also necessary to provide some training for the teachers who would spearhead this expansion. It was not considered possible to wait until all teachers were fully trained and schools were fully built before enrolling these pupils. Under the harsh conditions of refugee camp schools, children had learnt under trees and grass shelters, subjected to periodic bombing raids by enemy forces. During the first five years after Independence, many children in rural areas which had never been provided with schools before, studied under trees and in grass and mud shelters, as had been the case during the war years.

The ZINTEC Planning Committee comprised twelve carefully selected teacher educators most of whom were in their thirties selected from the existing teacher education colleges. They had been selected because of their experience (all had a minimum of five years as teacher trainers), but also because they were young and enthusiastic enough to adopt new ideas and processes. The Committee also included two members of the Liberation Movement teacher training team, an

experienced teacher educator provided by the British Council, and an education advisor provided by UNESCO. This was the team which set up the ZINTEC Program.

The ZINTEC training program comprised 36 distance education training modules. Students began by spending four months in a residential training course. A number of sites were established for these residential courses: they were mainly schools which had been abandoned during the war. It was possible to establish a site in every Region of the country. Pre-fabricated dormitories were constructed at these schools to enable students to be enrolled. On completion of the four month course, students were deployed in groups of three into selected schools. District tutors were appointed to support the distance education program for between 30 – 40 teacher trainees. District tutors were responsible for marking the assignments and organizing weekend and holiday courses. In addition the school heads and District Education Officers were in-serviced to support the trainees. They provided supervision for the students. Schools organized weekly seminars which soon came to include all teachers in these schools. The seminars were based on the distance education training modules. In the fourth year of the training course, students returned to their colleges for a final four months of residential training.

One important consideration was that the ZINTEC training course should not be inferior academically and professionally to the training provided by the conventional colleges. Thus every effort was made to ensure parity of quality with other courses. ZINTEC Colleges were forced to undergo rigorous scrutiny by the University of Zimbabwe Associate College system, as the University was the final arbiter of quality, and would provide the certification of the courses. This ambition was well fulfilled, with ZINTEC colleges and students performing, in many cases, better than their rivals.

An important aspect of ZINTEC was the rubric that students had to organize a community development or support program during each year of their training. No marks were provided for this, but students who did not do this could not pass. As a result, ZINTEC students were considered to be the best teachers by local communities. Many communities wanted to select ZINTEC students as school heads, and the Ministry had to intervene to inform them that students could not be selected as school heads!

An aspect of ZINTEC which the students found very attractive was that although they paid for the two residential courses at the beginning and end of their program, they were paid for all the years they were teaching in schools whilst simultaneously doing their in-service distance education training. The salary scale ensured that they received a pay rise for each successful completion of a year of training. This program was advantageous for students from lower income families who found it necessary to earn a living as soon as possible.

ZINTEC proved to be an extremely popular as well as high quality training course, and influenced all other colleges to become "Zintecized", which in effect meant that all colleges extended what had originally been a few weeks or a few months of practical teaching during the three year course to a full year of supervised practical training during which students were paid. Colleges also began to develop distance education programs to support students on teaching practice.

#### 3.4.3.2 Technical Teacher Training

It was decided that all secondary school students would receive an introduction to science and technology. Although this would not necessarily be sufficient training for them to earn a living in most cases, it would be a distinct advantage in comparison to the non-scientific and non-technological education of the past.

However, the problem was that the teachers had been provided with a lower level of science and technology education in the past. These teachers were not in a position to provide a world class level of technical and vocational education. There was need to balance the need to provide at least the basic orientation to technical / vocational education to students coming from mainly a peasant background, whilst at the same time aiming at improving the level of technical/vocational education and training that could be provided at secondary school level. This required both curriculum development and teacher education for the new technical and vocational education teachers.

The opportunity to respond to this challenge was provided by USAID which gave Zimbabwe a grant of about US\$100 million in 1982. The Government utilized this grant to expand technical and vocational training, constructing some sixteen institutions located in the different Regions of the country. The grant included construction, equipment and furniture. Zimbabwe was able to establish state-of-the-art technical training colleges for the first time.

Belvedere Technical Teacher Training College was one of the first colleges constructed under this scheme. In order to enable technical/vocational teachers to be available to teach in small secondary schools in remote rural areas, students had to combine one academic subject and one technical/vocational subject during their three years of training, thus making it possible for small schools to be able to offer a curriculum which would combine academic and technical/vocational education. This scheme lasted until 1990, when it was discontinued. Instead it now became necessary to enable teachers to gain more specialized training in technical subjects. The three year training was extended to a four year course, of which one year was devoted to a combination of industrial attachment and practical teaching. Thus Belvedere changed from a college which initially provided very basic technical training to one which now ran industrial level courses equivalent to those being run in polytechnics. One of the changes was that teacher training became more closely linked to industrial training, with many students who had undergone industrial training coming to Belvedere for pedagogical training. Trainees who had specialized in agriculture, engineering, catering, carpentry, building and technical graphics could now train as teachers. The secondary scheme and the secondary scheme academic subject and one teachers are scheme.

In addition to Belvedere, the Ministry initiated a program to upgrade technical and vocational education teachers in the University of Zimbabwe. It was fortunate that the University had a visionary Vice Chancellor in Professor Walter Kamba, as the vast majority of academics were opposed to the introduction of bachelors degrees in such subjects as Wood Work and Metal Work, accustomed as they were to offering degrees in more esoteric and academically acceptable subjects such as the Classics. The new degree of B. Ed. (Technical Subjects) improved the level of technical competence of technical/vocational teachers at secondary and teachers' college levels. This new degree programme was facilitated by the Swedish International Development Agency (SIDA), in collaboration with the Universities of Goteborg, Linkoping and London.

#### 3.4.4 The Gender Gap amongst Secondary School Teachers

Actually USAID provided an import facility for private enterprise to renew its industrial equipment, and private enterprise paid this money in local currency to the State. These funds were utilized for building teachers' colleges and technical colleges. As a result some sixteen colleges were built or expanded throughout the country.

The Ministry of Education ensured that there were a minimum of three qualified teachers at every secondary school, covering the three areas of Language and Humanities; Science and Mathematics; and Technical/Vocational subjects. The form of teacher training introduced at Belvedere facilitated such staffing patterns.

One unfortunate symptom of the period was that Zimbabwe's economy was already not able to absorb many technical college and university graduates, and they were forced to find jobs as secondary school teachers. Thus an engineering graduate would be forced to accept a post as a mathematics or science teacher. The Ministry of Education had to adjust its pay system to accommodate this new groups of recruits.

In 1981, women teachers comprised 36.6% of the total, but once the expansion got underway, the number of women teachers shrank to less than 30%. This was mainly due to the fact that the majority of unqualified teachers were men who were prepared to move to anywhere in the country, whereas women tended to remain closer to home.

# 4. The Roles of Government and Other Stakeholder Groups in Policy Development and Implementation

#### 4.1 Government Policy

Government policy, as stated in *Growth with Equity* <sup>16</sup>, was the most decisive factor in the changes made to the educational system. However, important stakeholder groups played a major role in the formation and application of these policies. ZANU PF, in order to maintain its popularity, responded to demands from the electorate, and amongst the electorate the demand for education was enormous. The response to demand affected the policies and their implementation, some times contradicting the advice of both the financial and educational technocrats.

#### 4.2 Involvement of the Parents and Community

Parents and local communities, including both the majority peasant farmers who had supported the Liberation Struggle so faithfully, and the urban workers, had to have their aspirations fulfilled, and education was one of their greatest demands. Government had to find ways to provide secondary education to as many as possible. The original plan to expand secondary education from 4% of the age group to 20% of the age group was shelved as a result of demand: instead the expansion rapidly covered over 60% of the age group, resulting in more challenges regarding quality than if the original plan had been adhered to.

Parents and communities successfully played a large role in the planning, organization and construction of primary and secondary schools. School Development Committees (SDCs) were formed for each school, comprising seven parents, the school head, one teacher elected by the teachers, and the elected local councilor. Communities were organized under District Councils.

The Ministry also attempted to decentralize other responsibilities to parents and communities, such as the selection and appointment of teachers. This was done in the first 4 - 5 years after Independence. This turned out to be quite a disastrous decision, and had to be rescinded by 1986. The problem was that the Ministry gave professional decisions such as the selection and transfer of teachers to communities which did not have the professional education and skills to make such decisions. Moreover the system instituted by the Ministry was poor, as it did not involve District Education Officers and representatives of the Teachers' Association. Bad decisions included the appointment of the sons of politically powerful personages as teachers as these were the few paid jobs available in rural areas, in preference to qualified and graduate teachers from outside or from a different ethnic group. School heads who were considered "arrogant" by poorly educated District Council officials would be transferred haphazardly from school to school, damaging continuity and the quality of education. Another problem was the eruption of "ghost" teachers, which enabled District Councils to corruptly obtain more money for their own use.

Another early problem was the abuse of the per capita grants, which were provided to District Councils for disbursement to schools. Elected district councilors would decide to utilize the funds for other development programs, such as construction of a beerhall, purchase of a tractor or of motor cars, payment of nurses, etc. A common problem was that most of the grant would be used

Growth with Equity is quoted extensively under Section 2 of this paper.

for travel by district officials and councilors, with the result that the schools would have few or no books. Later district officials and councilors learnt that they could invest the money, thus gaining substantial interest payments. Mistakes were also made in the ordering of teaching and learning materials, where school heads and staff were given little say in what materials should be ordered. The Ministry reacted by providing numerous training courses on the use of grants, but these courses turned out to be ineffectual. What proved to be effective were School Development Committees which insisted on being given their grants, but not all SDCs were well organized and powerful enough to insist on this. The 1991 Education Act gave the Ministry the power to provide the grants directly to parents, rather than through the District Council. This proved very unpopular with District Councils, and very popular with School Development Committees. SDCs worked more closely with the school authorities than did District Councils.

In reviewing the development of the education system in the first decade after Independence, it is clear that the massive expansion could not have been possible without the very enthusiastic participation of parents and communities. It is also evident that parents and communities remain dedicated to maintaining a high quality of education for their children. The mistakes made were very much due to the inexperience of the Ministry of Education, which could have factored in more professional support in the appointment and transfer of staff, and in the utilization of the per capita grants. Parental and community involvement needs to be organized within a reasonable time frame, with simpler tasks being established first, and moving on each year in phases to more complex responsibilities. For example the decentralization of parental selection and control of teachers was done too quickly and without adequate preparation, leading to near disaster.<sup>17</sup>

#### 4.3 The White Minority

An important part of the Independence Agreement at Lancaster House was that the white minority would be able to retain the high quality education that they had previously enjoyed. White commercial farmers, a very important part of the economy at that stage, were particularly anxious to ensure that their children's education would be well catered for. Immediately prior to Independence, the settler colonial Government had attempted to protect the white minority by "selling" European Education government schools to parents at a nominal price, so enabling them to control their own schools. This was reversed by the 1981 amendment to the Education Act. Nevertheless, the Government was anxious not to alienate this important group. Two provisions were made after negotiations: one was to allow strong parental participation in schools; the other was to allow whites to establish new private schools within the framework of the Ministry's regulations.

#### 4.4 Politicians and Parliament

Politicians and Parliament were heavily involved in the debate and passage of the various Education Acts and amendments. In general they required little persuasion, but they were prone to fight for more schools in their constituencies, as their re-election depended very much on how far they could respond to the demand for education. One important development was that Government made the decision early on that politicians should not interfere in the planning and siting of schools: in the first year of Independence there was a tendency for politicians to take over school planning

Parents in Zimbabwe today would not make the same mistakes as they made more than twenty years ago: today parents aim to prepare their children for university entry, and to do this they select the best qualified and most experienced teachers.

and siting as a way of winning popular support, so undermining a more technical and professional approach to educational planning.

### 4.5 Private Sector Participation

Although the majority of schools in Zimbabwe are known as "private schools", this term actually covers several different types of schools. In general most of these schools are not profit making, but are service providing. Nearly all of them enjoy some form of State subsidy, which can include building subsidies, the payment of salaries, and the payment of a per capita grant. Private schools, organized under "Responsible Authorities", include the following types of schools:

- District Council and community owned schools
- Elite schools, generally falling under the category of "independent schools"
- Farm schools
- Mission and other church schools
- ZIMFEP schools
- Profit making schools which are supervised and registered by Government but do not receive subsidies.

The private sector played a major role in school construction, which involved both small and large scale contractors, and well as pre-fab companies. The private sector is also involved in textbook development, publication and dissemination. The policy and strategy included supporting the increase in the number of publishers from less than half a dozen before Independence to over forty shortly afterwards. Through the Publishers' Association, courses were held to improve book development. Courses were also held to help book sellers to improve their knowledge and skills. Through the partnership between the Ministry and the publishers, Zimbabwe is self-sufficient in textbooks for the first eleven years of schooling. For textbooks for "A" levels and above, there is a system of licensing through which local publishers obtain a license to re-print standard textbooks.

#### 4.6 The Zimbabwe Foundation for Education with Production (ZIMFEP)

The education system which had been established during the Liberation Struggle by the Education Departments of ZANU and ZAPU were represented by the Zimbabwe Foundation for Education with Production (ZIMFEP). ZIMFEP was established in 1980 specifically to provide education for war veterans and former refugees. ZIMFEP established eleven schools and one college, all of them on farms with agriculture as a key subject. In addition to catering for war veterans and ex-refugees, they also catered for the local population. The idea was that graduates of such schools would be able to create self-employment through their skills, and this experiment proved to be highly successful. However, although ZIMFEP established an associate school program comprising 400 schools, the concept was never extended to all secondary schools.

ZIMFEP's achievements included the following:

• The construction of institutions by students trained in basic construction skills, the involvement of the local communities, with inputs through private enterprise. The main system was to utilize private pre-fab companies to provide the pillars, floor and roofing, with the students and communities doing the "fill-in". Schools were provided with well

- equipped laboratories and technical workshops. Technical college students also participated in school construction as part of their practical training.
- Some 15 000 war veterans and former refugees graduated from ZIMFEP schools since Independence. These war veterans and former refugees were funded by the Ministry of Education's War Veterans Scholarship Fund.
- The self-sufficiency projects aimed at cutting down costs in the day to day running of the schools. All schools are engaged in agricultural activities through the use of farms to produce their own food. Some schools have also ventured into the production of cash crops.
- ZIMFEP trained and promoted the development of theatre and culture by spearheading the
  formation of the Zimbabwe Association of Community Theatre (ZACT) which has
  become instrumental in the development and promotion of theatre and arts in the whole
  country. A number of well-known Zimbabwean music and theatre groups developed
  through these training programmes.
- A number of syllabuses and textbooks were published by ZIMFEP, and were accepted through the Ministry of Education system. ZIMFEP has also published several books on the concept of Education with Production.

ZIMFEP's most important achievement has been its experimental work of employment creation linked to job training.

#### 5. The Impact of the Reforms on Education Expenditure

The focus on education as a key objective for the liberation struggle meant that education would naturally be given a prominent place in Zimbabwe's development strategy. This was reflected in the change in education budget, which comprised 4.4% of the state budget in 1979/80 and rose to 22.6% in the 1980/81 budget. It was to remain at about this level for the rest of the decade (See Table 1).

In terms of Z\$s, the increase in investment was seven fold between 1980 and 1990, but in terms of US\$s, the increase was only 71%, as there was substantial devaluation of the Zimbabwe dollar during this period. The investment into secondary education rose from 16.1% of the Education Budget in 1980 to 29.5% in 1990.

The unit cost of secondary education was very high in 1980, at Z\$473.14 (US\$735.83) (See Table2). Whilst it had risen by 44% in terms of Zimbabwe dollars to Z\$679.60 by 1990, it had actually fallen to US\$257.82 in terms of US dollars. Table 2 shows that there was a dramatic fall in the cost of secondary education as measured in US\$s, so that the cost of secondary education in 1990 was only 35% of what it was in 1980. The unit cost reached its lowest point in 1985, when it was only 15% of the 1990 cost in US\$ terms. It is of interest to compare the unit cost of secondary education to that of primary education: in 1990 the unit cost of Primary Education was Z\$381.97 (US\$144.90). The secondary education unit cost was 77.9% higher than the primary education unit cost.

Fees were imposed at secondary level because at that time Zimbabwe could not afford free secondary education for all. Secondary school fees varied from Z\$257 (about US\$339.50) of a District Council Secondary School to Z\$1 226 (US\$1 619) for elite schools. This was affordable for about 50-60% of parents at that time, but excluded the very poor. Faced with limited

Gibbs Kanyongo, "Zimbabwe's Public Education System Reforms: Successes and Challenges", <u>International Education Journal</u>, 2005, 6 (1), p. 69.

<sup>&</sup>lt;sup>19</sup> In 1985 the per capita GDP was Z\$1 058 (US\$655.51) and in 1990 it was Z\$2 124 (US\$805.77).

resources, families were also likely to make decisions in favour of secondary education for boys rather than for girls.

In order to make secondary education for the majority feasible, it was essential to lower the unit cost of education. This was done through three instruments: firstly regulation of the teacher pupil ratio. The teacher pupil ratio at Forms 1-4 (Grades 8-11) was set at 1:30, whilst for the  $6^{th}$  Form it was 1:20. The second instrument was the utilization of community recruited unqualified teachers, who were paid about half the salary of the qualified teachers. These teachers were trained either through a teacher training course which allowed trainees to do part of the training in schools, or through a school based in-service training course provided by the Ministry for all unqualified teachers.<sup>21</sup> These para-professionals played a key role in providing education to remote rural communities who had never had access to education before. The third instrument was limiting the number of boarding schools: the expansion was in day secondary schools, although existing boarding schools were not closed down. (See Table 2 for unit costs). Subsidies for the boarding component of education were not increased, meaning that parents who still preferred boarding education had to pay for the boarding part themselves. Whilst this measure was appropriate, it also meant that children from poorer family could no longer access boarding education. As few scholarships were available, the situation arose where boarding education was a preserve of middle class children. An exception was made for a minority of children, such as those who attended ZIMFEP schools. A small number of NGOs provided scholarships to bright children from poor families to attend boarding schools, such as CAMFED, which established an excellent boarding scholarship program for girls from remote and poor rural areas.<sup>22</sup>

The requirements for setting up a day secondary school were lowered to the minimum: such schools had to establish 4 classrooms, 3 teachers' houses, and toilets. Standards were set up to control the quality of these buildings. Schools were supposed to have an enrolment of at least 80 pupils per year group, averaging about 320 pupils per school, but other factors, such as walking distance from homes were taken into consideration.

At the same time regulations were made to enable parents to charge themselves a fee, sometimes known as a "levy" to augment and improve upon State provision. They were able to control any funds they collected, but subject to State audits from time to time. The regulation was that a fee could be imposed in a school if 51% of the parents attending a parents' meeting agreed to this fee. However the Ministry of Education had the power to approve or disqualify a fee agreed upon by parents. In general the Ministry approved most parental agreements, although if there was evidence of excessive fees, the Ministry had the power to refuse. It was not allowed to exclude the children of parents who could not afford the fees charged according to the regulation. Such parents were supposed to pay in kind or by providing free labour for school projects. This system

In 1990 the unqualified teacher's salary was Z\$7344 – 8628 (US\$2786.04 – 3273.14) per annum as compared to that of a graduate teacher of Z\$14 532 – 23 256 (US\$5 512.90 – 8 822.46). The per capita income was Z\$2 124 (US\$805.77)in 1990. Source: Central Statistics Office, *Statistical Yearbook 1997*, CSO, Harare, 1998.

See <u>www.camfed.org</u> for more information.

An example of an "excessive" fee is when parents want every child to have computer education, and impose a fee to enable them to purchase computers and run such courses. Whilst this is a laudable ambition, it may need to be informed by the fact that probably the majority of parents cannot afford such a fee. Some adjustment needs to be made to cater for the less well off parents.

Although the regulations stated that no child could be excluded from primary schooling because of the inability of parents to pay fees known as "levies" which had been agreed upon by the majority of parents, in fact there are cases of schools where middle class parents were able to pressurize poorer parents to remove their children. This is particularly the case in the former European education primary schools, where the new black middle class insisted on creating higher standards such as lower teacher pupil ratios. The situation arose where parents employed additional teachers to those paid for by the State, in order to reduce the size of classes.

worked well on the whole, with parents themselves deciding on what they could afford and what they should do. However, on the negative side, the system enabled middle and upper class parents to do much more than working class and peasant parents. The Ministry, on the other hand, tried its best to ensure that every school provided as high a standard of education as possible.

Education Budget in Z\$s	218.437	316.508	408.743	502.629	516.765	639.919	761.442	849.691	1 066.837
Index of Increase in Z\$s	100	149	187	230	237	293	349	389	488
Education Budget in US\$s	339.715	459.373	539.951	497.160	415.406	396.480	457.323	527.431	549.067
Index of Increase in US\$s	100	135	159	146	122	117	135	155	162
Total Government Budget	978.966	1 210.827	1 687.281	2 368.433	2 765.529	2 935.03	3 549.017	4 067.515	4 738.055
Education Budget as % of Total	22.3	26.1	24.2	21.2	18.7	21.8	22.6	20.9	22.5
Secondary Education Budget	35.164	40.394	46.108	62.870	66.671	81.260	96.676	211.712	293.825
Secondary Ed. as % of Total Ed. Budget	16.1	12.8	11.3	12.5	12.9	12.7	12.7	24.9	27.5

Sources: Ministry of Finance, Estimates of Expenditure, 1980/81 – 1990/91, presented to the Parliament of Zimbabwe, and Ministry of Education and Culture, Annual Report of the Secretary for Education and Culture, 1980 – 1990, presented to the Parliament of Zimbabwe. Note that the Financial Year in Zimbabwe at the time was from July – June, whereas the Annual Report of the Secretary for Education and Culture was for the period January – December.

Note: The amounts are in terms of actual expenditure. The US\$:Z\$ exchange rate is given in Table 2.25

It is of interest to note that the increase in the education budget over the decade, whilst substantial, is lower in terms of US dollars than when measured in Zimbabwe dollars. This indicates that Zimbabwe used the

	150.11	254 45	20 5 40	240.40	4 40 44	4 40 40	100 10	250 11	450.00
Unit cost in	473.14	271.67	205.69	210.69	160.11	168.42	180.40	350.14	458.38
Z\$s									
Index of	100	57	43	45	34	36	38	74	97
Increase in									
Z\$s									
Unit cost in	735.83	394.30	271.72	208.40	128.71	104.35	108.35	217.34	235.91
US\$s									
Index of	100	54	37	28	17	14	15	29	32
Increase in									
US\$s									
Exchange	1:0.643	1:0.689	1:0.757	1:1.011	1:1.244	1:1.614	1:1.665	1:1.611	1:1.943
Rate									
US\$:Z\$									

Sources: Calculated from figures from Ministry of Finance, *Estimates of Expenditure*, 1980/81 - 1990/91, presented to the Parliament of Zimbabwe, and Ministry of Education and Culture, *Annual Report of the Secretary for Education and Culture*, 1980 - 1990, presented to the Parliament of Zimbabwe.

Note 1: Exchange rate 1980 – 1986 from World Bank, *Zimbabwe – A Strategy for Sustained Growth*, 1987, and 1987 – 1990 from Central Statistics Office, *Statistical Yearbook 1997*, CSO, 1997, p. 214.

Note 2: The Unit Cost of Primary Education in 1990 was Z\$381.97 (US\$144.90).

#### 6. Impact on Access to Secondary Education during the 1980 – 1990 Period

This Section looks at 6.1. Increase in Schools and Enrolments; 6.2. Increase in 6<sup>th</sup> Form Enrolments; and 6.3. Gender Gap in Secondary Enrolments.

#### 6.1 Increase in Schools and Enrolments

In 1980 there were 197 secondary schools, and by 1990 this had increased to 1 512, an almost eight fold increase. Enrolments increased from 74 321 in 1980 to 665 791 in 1990, an almost nine fold increase (See Table 3). By 1990 there was one secondary school catering for every three primary schools, far above the 1:5 ratio originally planned. However the question arises of how qualitative this leap forward was, and whether it produced some new problems and challenges for the country.

Table 3. Number of Secondary Schools and Secondary Enrolments 1980 - 1990

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
No. of	197	685	738	790	1 182	1 215	1 276	1 395	1 484	1 506	1 512
Schools											
Index of	100	348	375	401	600	617	648	708	753	764	768
Increase											
Enrolment	74321	148690	224166	316438	416413	482000	536427	604652	641005	670553	665791
Index of	100	200	302	426	560	649	722	814	862	902	896
Increase											

Source: Figures from Annual Report of the Secretary for Education for 1980 - 1990.

## 6.2 Increase in 6<sup>th</sup> Form Enrolments

At  $6^{th}$  form or "A" levels (Grades 12 and 13) the increase was less exuberant, with a four fold increase during this period. Only 2.8% of the students who entered the "O" levels examinations were able to proceed to "A" levels.

Table 4. Increase in Lower 6<sup>th</sup> Form Enrolment, 1980 - 1990

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Number	1 930	2 451	3 127	3 680	4 025	5 423	6 299	6 401	7 946	7 741	8 273
of											
students											
Index of	100	127	162	191	209	281	326	332	412	401	429
Increase											

Source: Figures from Annual Report of the Secretary for Education for 1980 - 1990.

#### 6.3 Gender Gap in Secondary School Enrolments

During the period girls comprised about 40% of secondary school enrolment, with only slight variations. However at 6<sup>th</sup> Form level, girls comprised about a third, despite the fact that the Ministry of Education had instituted regulations to try to ensure that an equal number of boys and girls were enrolled at this level.

#### 7. The Impact on Student Learning Achievement

This section will be based mainly on the measurement of learning through the Cambridge O" taken at Form 4 (Grade 11) which is the terminal examination for most students. It is used to select the top 2 - 3% who will enter the "A" or advanced level, a two year preparatory course for entry into university and other higher education courses. This section includes the following: 7.1. A Comparison of 1980 to 1990 "O" Levels Examination Results; 7.2. Comparison of Number of Subjects Passed, 1985 - 1990; 7.3. A Comparison of Urban to Rural "O" Levels Examinations Results, 1990; 7.4. A Comparison of 1980 to 1990 "A" Levels Examination Results; 7.5. Conclusions on the Comparison of "O" and "A" Levels Results.

#### 7.1 A Comparison of 1980 to 1990 "O" Levels Examinations Results

Table 5 shows that the number of "O" levels examination candidates increased almost twenty five fold between 1980 and 1990. The number of candidates who passed five subjects with Grade C or better increased almost eighteen fold.

Table 5. "O" Levels Examination Results: Number and % of Candidates with 5 or More Subjects with Grade C or Better

Year	Number of Candidates	Index of Increase	Number Passed 5 or More Subjects	Index of Increase	% Pass	
1980	7 818	100	1 460	100	18.7	
1990	194 654	24 898	25 651	17 569	13.2	

Source: Zimbabwe Schools Examination Council.

#### 7.2 A Comparison of Number of Subjects Passed, 1985 - 1990

Table 6 compares the number of passes at the "O" Level examinations for 1985 – 1990.

Table 6. A Comparison of Number and Percentage of "O" Level Passes 1985 –1990

	198	35	1986		198	37	198	8	19	89	199	00
	Number	%	Number	%	Numbe r	%	Number	%	Numb er	%	Number	%
Passed 5 or more subjects	14 762	13.1	14 566	11.5	18 124	11.9	18 647	12.5	22 430	13.5	25 651	13.2
Passed 4 or more subjects	20 642	18.3	20 221	15.9	25 412	16.7	25 535	17.1	29 825	17.9	34 473	17.7
Passed 3 or more subjects	28 591	25.3	27 989	22.0	35 631	23.4	34 525	23.1	40 156	24.1	46 874	24.1
Passed 2 or more subjects	40 950	36.3	41 071	32.3	53 811	35.4	50 497	33.1	57 909	34.7	68 519	35.2
Passed 1 or more subjects	65 904	58.4	69 105	54.3	97 476	64.0	89 247	59.6	101 296	60.8	116 180	59.7
Failed all subjects	46 979	41.6	58 160	45.7	54 705	36.0	60 455	40.4	65 351	39.2	78 474	40.3
Total	112 881	100.0	127 265	100.0	176 862	100.0	149 702	100.0	166 647	100.0	194 654	100.0

Source: Ministry of Education and Culture, Annual Report of the Secretary for Education and Culture, 1985 – 1990. Notes: More detailed data for 1980 – 1984 were not readily available. The Cambridge "O" Level Examinations are standardized, and therefore offer comparability.

There are a number of ways of analyzing the data available in Table 6. On the one hand, it is evident that only between 11 - 13.5% of the candidates qualified for "A" Level entry, although in 1990 only a quarter of these, 8 273 candidates, were able to gain "A" level places.

At the other extreme those who failed all subjects in the post-Independence period comprised about 40% of the total. By 1990 the number failing all subjects had swelled to almost 80 000. In addition to this another 40% passed only 1 – 3 subjects, as less than 20% passed 4 or more subjects. Such a high failure rate points to serious curricular and systems failures. A major contributor to this failure was the rigidity of the system, which channeled all students to the British Cambridge University "O" levels examinations<sup>26</sup>, a system that has since been changed in Britain itself, but is still faithfully retained in many former colonies. A number of attempts were made by the Ministry of Education over the first decade after Independence to produce a more flexible secondary education system, but this was repeatedly rejected at the highest level on the grounds that it would produce inequity: in their view every child should be given the opportunity to do the "O" levels as "O" level education was the standard in Britain. The British system, rather than relevance to the developmental needs of Zimbabwe, remained the standard by which the education system was measured.

Note the Rhodesian European Education system included two streams: an academic and a technical/vocational stream. Unfortunately this settler colonial system placed less capable students in the technical/vocational stream.

#### 7.3 A Comparison of "O" Levels Results by Subjects, 1990

Table 7 identifies key subjects which are taken by a large number of candidates at "O" levels.

Table 7. "O" Levels Examinations Results by Subject, 1990

Subject	Number of Candidates	% with Grade C or Better
i. English Language	163 586	18.5
ii. English Literature	48 070	44.3
iii. History	58 092	32.3
iv. Geography	119 204	27.9
v. Shona and Ndebele (African Languages)	115 405	61.1
vi. Mathematics	87 946	23.4
vii. Core Science	127 566	24.8
viii. Agriculture	45 766	51.8
ix. Woodwork	6 215	63.7
x. Fashion and Fabrics	11 935	36.7
xi. Commerce	44 866	34.0
xii. Principles of Accounts	22 015	42.8

Source: Zimbabwe Schools Examinations Council.

Table 7 indicates that it is only in two subjects that more than 60% of the candidates attained a pass of Grade C or above: African Languages (61.1%) and Woodwork (63.7%). More than 50% of the candidates passed Agriculture. Over 40% of the candidates passed English Literature and Principles of Accounts. Over 30% passed History, Fashion and Fabrics and Commerce. Over 20% passed Geography, Mathematics and Core Science, and only 18.5% passed English Language.<sup>27</sup>

In analyzing these results it appears that the best results in academic subjects was in African Languages and English Literature. On the other hand, students were able to do relatively well in three of the five practical subjects: Woodwork, Agriculture, and Principles of Accounts, whereas in Fashion and Fabrics and Commerce only a third of the candidates passed. Only a third of the students passed History. About a quarter of students passed in Geography, Core Science and Mathematics, and only 18.5% passed English Language.

The relatively better results in practical subjects may be due to the fact that practical subject classes are generally smaller than academic subject classes, averaging 15-20 students, due to the need for close supervision when students are using machinery. In addition the need to utilize machinery and equipment means that learning is put into practice, rather than being merely theoretical. It may also be that practical subjects are more relevant to more students, as they may lead to employment.

The poor showing in academic subjects with about a quarter of students passing in Geography, Mathematics, and Core Science, and less than 20% in English Language, indicates that the teaching

Unfortunately it was not possible to obtain a subject breakdown of the 1980 "O" Levels Examinations results.

and learning of these subjects requires serious attention, in terms of curriculum, textbooks, and teaching.

# 7.4 A Comparison of Urban to Rural "O" Levels Examinations Results,1990

A study was undertaken by the Ministry of Education in 1991 to compare the examination pass rates of urban as compared to rural students in the 1990 Cambridge School Certificate "O" Level. A selection of the results in certain subjects which had a large number of candidates is shown in Table 6 below. The Table indicates the number and percentage of students who gained "C" or above in the examinations. This includes five practical subjects.

Table 8. Comparison of Urban to Rural "O" Levels Examinations Pass Rates, 1990

Subject	Url	oan	Rural			
	No. of Candidates Passing	% of Total Urban Candidates	No. of Candidates Passing	% of Total Rural Candidates		
i. English Language	11 210	25.9	12 386	15.0		
ii. English Literature	4 838	46.8	5 753	43.1		
iii. History	5 045	25.4	12 699	37.9		
iv. Geography	10 102	29.5	20 750	28.6		
v. Shona and Ndebele (African Languages)	19 140	58.6	48 330	63.0		
vi. Mathematics	6 046	19.0	12 707	27.4		
vii. Core Science	9 536	24.9	20.415	26.1		
viii. Agriculture	2 166	44.3	21 479	52.7		
ix. Woodwork	2 701	63.5	1 238	64.0		
x. Fashion and Fabrics	1 932	36.7	2 374	36.2		
xi. Commerce	4 479	31.7	7 296	34.2		
xii. Principles of Accounts	4 324	38.2	3 439	50.0		

Source: Ministry of Education and Culture, Examinations Branch, unpublished document entitled "C.S.C. 'O' Level 1990: Statistics: Passes of 'C' or Better in Each Subject by Location", 1991.

This Table shows that in some subjects, such as English Language, urban students have a distinct advantage, with 25.9% of them passing in comparison to only 15.0% of rural children. This advantage is less in English Literature where 46.8% of urban children compared to 43.1% of rural children gained "C" and above. It would appear that where specific texts are studied as in Literature, students can do better than when their language competencies are tested on texts they have not seen before. On the other hand in some subjects, such as Geography (29.5% as compared to 28.6%)<sup>28</sup>; Core Science (24.9% as compared to 26.1%); Woodwork (63.5% as compared to 64.0%); Fashion and Fabrics (36.7% as compared to 36.2%) the results were almost the same. In some subjects rural children enjoyed a distinct advantage such as in History (25.4% as compared to 37.9%); African Languages (58.6% as compared to 63.0%); Agriculture (44.3% as compared to

In each case the urban result is stated first and the rural result second.

52.7%); Commerce (31.7% as compared to 34.2%); and Principles of Accounts (38.2% as compared to 50.0%).

This study shows that rural children are doing as well as or even better than urban children except in English Language. The results are skewed by the fact that "rural" includes both well established mission schools and the newly established District Council schools. "Urban" schools include both the former township schools , which traditionally were highly selective and had excellent examination results, as well as the former "European" schools which had a history of "secondary education for all". Township schools have continued to be highly selective and to have excellent results, whereas former "European" schools took all students eligible by location. <sup>29</sup>

Another interesting finding is that students performed better in "practical" subjects (subjects viii – xii) than in the traditional "academic" subjects, with the exception of English Literature, African Languages, and History.

## 7.5 Comparison of 1980 to 1990 "A" Levels Examination Results

A comparison of the number of candidates in 1980 and 1990 shows there was an almost fifteen fold increase, whilst the number who passed showed an almost nineteen fold increase. The percentage of students who passed 2 or more subjects with Grade E or better increased from 46.0% to 67.8%. As the "A" levels entry is highly selective, the performance at this level improved substantially over the decade.

Table 9. "A" Levels Examination Results: Number and % of Candidates with 2 or More Subjects with Grade E or Better

Year	Number of Candidates	Index of Increase	Number Passed 2 or More Subjects	Index of Increase	% Pass
1980	1 146	100	527	100	46.0
1990	14 722	12 846	9 984	18 945	67.8

Source: Zimbabwe Schools Examination Council.

#### 7.6 Conclusions on "O" and "A" Levels Results

Zimbabwe faithfully adhered to the Cambridge University "O" and "A" Levels examinations throughout this period. There was a huge increase in the number of students at both levels. The percentage of students achieving five or more subjects at Grade C or above at "O" levels decreased from 18.7% to 13.2%. Whilst some 47% of students passed 1 – 4 subjects, another 40% failed all subjects. This large failure rate is a matter for serious concern, and shows severe wastage.

At "A" levels the percentage passing 2 or more subjects with Grade E or better improved from 46.0% to 67.8%, showing that at this level the overall results improved despite the huge expansion of numbers.

One of the reasons for the rigid adherence to the Cambridge "O" level system was that it was and is perceived to embody "high quality" linked to an international standard, as represented by Cambridge University Examination Syndicate, whereas any deviation from this model would be seen as tampering with this "high quality". It is to be noted that most of those who passed 1-3

The Ministry of Education at the time controlled the level of fees charged by the parents themselves such that lower income children could still attend these schools.

subjects succeeded in an African Language and in practical subjects.<sup>30</sup> Nevertheless, the insistence by the Government that the "O" level model be the main model for the country has served as an expensive strait jacket.

#### 8. The Post-Independence Evolution of the Secondary Education System

The post-Independence period witnessed the change from an elitist secondary school system preparing students for university to a mass secondary education system. Whilst 1990 figures were not accessible, the 1992 figures show that about 65.7% of 15 - 18 year olds were at secondary school.<sup>31</sup> This is a big increase from the 4% who were able to access secondary education in 1980.

There was a substantial increase in the Ministry of Education Budget as a whole, whilst at the same time there was a substantial decrease in the unit cost of secondary education, particularly in terms of US\$s.

There were a number of innovations which enabled this immense expansion to take place, including in the areas of planning, construction, parental and community participation, private enterprise participation, curriculum development, textbook development and teacher education. These innovations have become institutionalized into the education system, enabling access, quality and relevance to be sustained during this period. Of particular note was the "Zintecization" of teacher education so that student teachers had to spend a substantial part of their training in the field, receiving in-service distance education. The ZIMSCI program and the Technical Subject kits promoted a hands-on approach to the teaching of science and technology. The utilization of distance education methodologies for textbook writing and for teaching and learning at secondary school level enabled the country to utilized underqualified and unqualified teachers.

The number of students qualifying to enter "A" levels increased from 1 460 in 1980 to over 25 650 in 1990, a seventeen fold increase.<sup>32</sup> On the other hand, the large failure rate at "O" levels, comprising about 40% of the total, remains a serious indictment of the system.

Nevertheless a number of experiments continued, the most notable of which was the ZIMFEP secondary school model, in nine schools. This highly popular system enabled students to combine academic study with a substantial amount of practical education, in particular in agriculture; woodwork; metal work; tie and dye; shoe making and leather work; tailoring; etc. There were a number of variations on this model: in some programs students were not required to do "O" levels. However, the ZIMFEP model, whilst it remained popular with parents and students<sup>33</sup>, was never fully embraced by the political and education establishment as a whole, and remained a pilot project run by an NGO.<sup>34</sup> The rejection of the ZIMFEP model was also linked to the political move of the ruling party from the socialist ideology of the Liberation Struggle to the Washington Consensus of Structural Adjustment, favouring the rise of a capitalist middle class.

#### 9. Lessons from the Zimbabwe Experience for Other Countries in SSA

Calculated from figures in Central Statistics Office, *Statistical Yearbook 1997*, CSO, Harare, 1998, pp. 21 and

Note that since 2004 there has been concerted effort to remove the ZIMFEP model entirely from the education system.

See Table 6.

<sup>67.</sup>However only a quarter of these were able to continue to "A" levels.

One of the reasons for ZIMFEP's popularity with parents and students was that its graduates were able to find jobs as artisans and workers, whereas many "O" level leavers remained unemployed.

During the period under study, Zimbabwe had just emerged from more than fifteen years of armed struggle which had affected the whole population. There was tremendous enthusiasm amongst the ordinary population for change, and one of the most important areas of change was education. A century of educational deprivation led people to believe that it was the lack of education and the poor quality of African education which had kept the people oppressed.

However, an immediate problem was that every Zimbabwean, whether black or white, whether peasant, worker or middle class, knew exactly what type of education they wanted: that is the education that white people used to have. This included the powerful decision makers: any one who came in to suggest that any other form of education was desirable would have been seen as "anti-revolutionary", and would have been accused of wanting to give blacks an inferior type of education. Arguments that the European education system was unsuitable, irrelevant, too expensive (with a unit cost that was nine times more than for African education), etc., fell on deaf ears.

However, the fact that the two Liberation Movements had been running education programs under very difficult conditions in refugee camps in Mozambique and Zambia gave them political clout. The educational leaders who had been in the Liberation Struggle were now in powerful political positions as Ministers, parliamentarians, and senior bureaucrats. As part of the new post-Independence Government, they were in key decision making positions. The challenge was how to provide high quality education for all at affordable costs.

More than two decades later, it is appropriate to examine the impact of this massive expansion of secondary education. Positive impacts included the following:

- The attainment of a high quality of secondary education for the majority is very feasible in Africa, and can be attained in a cost effective manner.
- The educational map of Zimbabwe changed within one generation. Whereas their parents generally had only three years of primary education (for most men) or were illiterate (for most women), the post-Independence generation had secondary education. Zimbabwe has one of the most highly educated populations in Africa.
- The demographic picture has changed in Zimbabwe, with a population growth rate similar to that in the West. The introduction of primary education for all and secondary education for the majority has had a major impact on population increase rate.
- A more highly educated population is more aware of human rights than was possible for their parents and grandparents. As a result there has been a more vocal and organized demand for human rights.
- The secondary and tertiary education expansion and improvement have enabled Zimbabwe to make a technological jump from a peasant based technology to a modern information based technology. This has enabled Zimbabweans to cope better with global challenges, as demonstrated by the phenomenon of the diaspora.

#### Negative impacts are as follows:

• More and better quality education has increased aspirations and expectations in terms of employment, standard of living, human rights, etc. As the economy did not expand and improve in line with the expansion and improvement of the education system, this created a crisis of expectations, leading to more political and social instability. A generational gap is evident, with greater criticism of Government from the youth, whereas their parents and grandparents remain fervent supporters of a Government that provided them with such

- basic necessities as water, education, health facilities, etc., not available to blacks before Independence.
- There has been an exodus of about 2 million young people from the country as a result of the lack of employment opportunities in Zimbabwe. Their high quality education made them marketable within the region and globally. The crisis in Zimbabwe can be compared to the crisis in Rwanda which led to the 1994 genocide. It can be said that having a highly educated youth made them more mobile within a global economy and global village, whereas if they had remained illiterate and semi-literate they would have been confined to the borders of their country.
- However, expansion of the education system without a commensurate modernisation of the traditional economy, presents inherent problems. Whilst secondary education helps to modernize the economy, it is equally important for the traditional economy to be modernised to include modern forms of agriculture and a certain level of industrialization in order to cope with the rising number of secondary school graduates. Higher secondary and tertiary enrolments need to be complemented with adequate economic growth and industrialization. Thus secondary education presents both challenges and solutions. In Zimbabwe there has been a serious disjuncture between education and economic development.
- In general, Zimbabwe clung to the Cambridge Examination system, rejecting closer linkages with productivity. As a result there is a gap between labour demands and labour supply: there is presently a serious shortage of workers and yet there are many unemployed youths.

#### **Conclusions**

Secondary education in Africa provides a bridge between the traditional and colonial values and economy to more modern and global values and economies. In particular the introduction to modern science and technology provides the possibility of improving peasant agricultural methods and entering into some forms of industrialization. The challenge is how to manage an education system which still has its roots in peasant values and agriculture, whilst on the other hand preparing students for work in a globalized modern economy, whose values may be distinctly different from those of the traditional peasantry. There is need to satisfy the needs of the majority of the population, who are subsistence agriculturalists<sup>35</sup>, whilst at the same time there is also need to prepare students for the global economy and labour market, which they can participate in within their life time. This dual need can be contradictory at times, particularly if majority of the population, as in Zimbabwe, remains in the traditional economy.

In the case of Zimbabwe, the decision to prepare secondary students for the British Cambridge University Examinations meant that the curriculum, with some important adjustments to reality, were preparing students to live in a developed economy such as that of Britain, rather than in a developing economy such as that of Zimbabwe. It is therefore not surprising to find that several million young Zimbabweans have emigrated to more developed countries such as South Africa and Britain, where they have managed to do well. They were, however, not in a good position to transform their own country from a developing country into a developed country. That students did so much better in Woodwork and in Agriculture in the "O" levels examination may demonstrate that these subjects are relatively more relevant to their real life situations.

In 1992, 69.39% of the population were rural. Information from the Central Statistics Office, *Statistical Yearbook 1997*, Harare, 1998, p.25.

The World Bank Discussion/Background Paper entitled *The Public Sector and Poverty Reduction Options*<sup>36</sup> examines the ZIMFEP model of education, and recommends that "stronger support should be given to technical/vocational training offered by ZIMFEP and other institutions with a proven record of providing market-relevant skills- combinations." Such models have a potential for satisfying the labour market needs of the agriculturally based traditional economy, whilst at the same time not neglecting their potential for participating in a global economy. ZIMFEP graduates are in a position to start their own small scale enterprises which can help the transformation of the rural economy. ZIMFEP models vary from one to three days a week being spent on technical/vocational subjects. Students also can gain "O" and "A" levels qualifications in most programs, although in some courses only basic literacy and numeracy are required.

World Bank, *The Public Sector and Poverty Reduction Options*, Discussion/ Background Paper, The World Bank, Harare, 1996.

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#### **Persons Interviewed**

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Peter Mabande, Chief Executive Officer, Zimbabwe Teachers' Association, ZIMTA

Jannie Makawa, Former Principal, Belvedere Technical Teachers' College.

Phineas Makhurane, Former Vice Chancellor, National University of Science and Technology, NUST

John Maramba, Assistant Director for Research and Development, Zimbabwe Schools Examination Council, ZIMSEC

Happy Jabulani Ndanga, Director, Zimbabwe Schools Examination Council, ZIMSEC

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