National Library of Canada
Bibliothèque nationale du Canada

Acquisitions and Bibliographic Services Branch
Direction des acquisitions et des services bibliographiques

395 Wellington Street
Ottawa, Ontario
K1A 0N4

395, rue Wellington
Ottawa (Ontario)
K1A 0N4

Your file Votre référence

Our file Notre référence

NOTICE

The quality of this microform is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Reproduction in full or in part of this microform is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30, and subsequent amendments.

AVIS

La qualité de cette microforme dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

La reproduction, même partielle, de cette microforme est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30, et ses amendements subséquents.

Canada

M.A. THESIS

Theoretical Perspectives on Attempts at Planned Educational Change in Kenya and Zimbabwe

Presented in Partial Fulfilment for the
Degree of Master of Arts in Education

Robert Douglas Sauder

May 1994

© Robert D. Sauder, Ottawa, Canada, 1994

National Library of Canada
Acquisitions and Bibliographic Services Branch
395 Wellington Street
Ottawa, Ontario
K1A 0N4

Bibliothèque nationale du Canada
Direction des acquisitions et des services bibliographiques
395, rue Wellington
Ottawa (Ontario)
K1A 0N4

Your file Votre référence

Our file Notre référence

THE AUTHOR HAS GRANTED AN IRREVOCABLE NON-EXCLUSIVE LICENCE ALLOWING THE NATIONAL LIBRARY OF CANADA TO REPRODUCE, LOAN, DISTRIBUTE OR SELL COPIES OF HIS/HER THESIS BY ANY MEANS AND IN ANY FORM OR FORMAT, MAKING THIS THESIS AVAILABLE TO INTERESTED PERSONS.

L'AUTEUR A ACCORDE UNE LICENCE IRREVOCABLE ET NON EXCLUSIVE PERMETTANT A LA BIBLIOTHEQUE NATIONALE DU CANADA DE REPRODUIRE, PRETER, DISTRIBUER OU VENDRE DES COPIES DE SA THESE DE QUELQUE MANIERE ET SOUS QUELQUE FORME QUE CE SOIT POUR METTRE DES EXEMPLAIRES DE CETTE THESE A LA DISPOSITION DES PERSONNE INTERESSEES.

THE AUTHOR RETAINS OWNERSHIP OF THE COPYRIGHT IN HIS/HER THESIS. NEITHER THE THESIS NOR SUBSTANTIAL EXTRACTS FROM IT MAY BE PRINTED OR OTHERWISE REPRODUCED WITHOUT HIS/HER PERMISSION.

L'AUTEUR CONSERVE LA PROPRIETE DU DROIT D'AUTEUR QUI PROTEGE SA THESE. NI LA THESE NI DES EXTRAITS SUBSTANTIELS DE CELLE-CI NE DOIVENT ETRE IMPRIMES OU AUTREMENT REPRODUITS SANS SON AUTORISATION.

ISBN 0-612-00574-7

Canadä

UNIVERSITÉ D'OTTAWA
UNIVERSITY OF OTTAWA

Abstract

In the field of comparative education, studies of school systems in the developing world can yield interesting and useful knowledge both for the enhancement of reform efforts there, and the understanding of education everywhere. Many case studies exist of attempts to plan and implement educational change. However few of these are integrated within comprehensive frameworks. Consequently there is limited scope for comparison among cases. This study examines four cases of planned educational change -- two in Zimbabwe and two in Kenya. The four cases are examined within two theoretical perspectives: *the management perspective* and *the world systems perspective*. The former emphasizes the primacy of appropriate management of educational reform in such areas as decentralized administration and contingency analysis. The latter centres on the role of political dynamics such as the fragility of the state and notions of societal progress within the world system, and the effects these have on educational reform. This study undertakes two levels of analysis. At one level it assesses to what extent each of the reforms achieved their stated goals. At a second level it offers a comparison of the two theoretical perspectives in an attempt to assess which perspective provides a more comprehensive understanding of the dynamics and outcomes of the planned educational change in East Africa. Historical descriptive analysis of the cases elucidates many constraints to planned educational change in Kenya and Zimbabwe, both administrative and political. Although both perspectives are valuable in understanding educational reform, the world systems perspective offers a more comprehensive framework for understanding the key political and economic dynamics that the management perspective does not. These findings have implications for scholars, administrators and policy makers.

Acknowledgements

This study is dedicated to Cheryl Witoski, without whose love and support it would have been impossible. Ariana and Fiona Sauder also deserve great thanks.

There are many people to whom I owe much for the help they gave me in this project. Firstly I would like to thank Richard Maclure for being a superb supervisor. My father, Ronald Sauder, gave me tremendous help both in advice and in logistical support. There are others who deserve mention. These include: Peter Ostrom, Kathleen Sauder, Rob Finch, Martha Coates, Gordon Langill, Andrew Chirchir, Ruth Wright, Jane Whitney, John Saxby, and Marcia Burdette.

Table of Contents

List of Abbreviations....................................vi
List of Tables...vi

Chapter one

1.0 Introduction...2
1.1 Background Information on Kenya and Zimbabwe........3
1.2 History of Education in Kenya and Zimbabwe..........7
1.3 Purpose of Study and Research Questions.............13
1.4 Rationale...13
1.5 Methodology...16
1.6 Outline of Chapter Contents.........................19
1.7 Notes for Chapter One...............................21

Chapter two

2.0 Introduction..23
2.1 The SMEA Program....................................23
2.2 The 8-4-4 Program...................................29
2.3 The ZIMFEP Program..................................38
2.4 The ZINTEC Program..................................42
2.5 Case Study History Summary: Table I 51
2.6 Overall Conclusions for the Case Studies............52
2.7 Notes for Chapter Two...............................53

Chapter three

3.0 Introduction:Conceptual Framework of the Thesis.....58
3.10 The Management Perspective.........................60
3.11 Decentralization & Indigenization of Decision-making, ...61
3.12 Managing Internal Political and Organizational Resistance..63
3.13 External Factors and Contingency Analysis..........64
3.14 Summary of Key Components of Management............68
3.2 The World Systems Perspective.......................68
3.21 Schooling and the Power of the Modern Myth.........69

3.22 Legitimation of the Fragile State 70
3.23 International Influences on Education and the Fragile State.......................................71
3.24 The Fragile State and Local Culture.................73
3.25 The Fragile State and Economic Limitations..........74
3.3 World Systems Theory and Dependency Theory..........76
3.4 Summary of Key Components of World Systems..........77
3.5 Notes for Chapter Three.............................78

Chapter four

4.0 Introduction..81
4.1 Analysis from the Management Perspective Case 1 SMEA...83
4.2 Case 2 8-4-4..88
4.3 Case 3 ZIMFEP.......................................93
4.4 Case 4 ZINTEC.......................................98
4.5 Analysis from the World Systems Perspective Case 1 SMEA..105
4.6 Case 2 8-4-4.......................................109
4.7 Case 3 ZIMFEP......................................118
4.8 Case 4 ZINTEC......................................123
4.9 Notes for Chapter Four.............................131

Chapter five

5.0 Introduction.......................................133
5.1 Educational Reform as a Political Process..........133
5.2 Summary Comparisons of each Perspective.............137
5.3 Implications for Planned Educational Change..........144

6.0 References...148

List of Abbreviations

8-4-4 = the program to restructure the Kenyan school system into three stages of eight years primary, four years secondary, and four years tertiary

EWP = Education with Production

KANU = Kenya African National Union

KIE = Kenya Institute of Education

KNUT = Kenya National Union of Teachers

SMEA = Science and Mathematics of East Africa

UNDP = United Nations Development Plan

ZANU = Zimbabwe African National Union

ZIMFEP = Zimbabwe Foundation for Education with Production

ZINTEC = Zimbabwe National Integrated Teacher Education Course

List of Tables

Table I Case Study History Summary Table.........................51

Table II Factors in Environmental Assessment.....................66

Table III Criteria for Judging Components of Innovation...........67

Chapter One
Background Information
Rationale, Research Questions, Methodology,

1.0 Introduction

Why study education in the developing world? There are at least three powerful arguments which can be cited regarding this question. The first is a moral argument. Education is considered a basic human right and is a foundation for societal progress. Yet in the developing world education is plagued by severe problems and hopes of positive changes can at times be dim and disheartening. Secondly, the political turmoil commonly seen in developing countries will ultimately touch us in the West both in political and economic terms. Thirdly, the problems confronted by those who would implement change in the education systems in developing countries are not unique, and we can benefit greatly in studying them.

Zimbabwe and Kenya are good choices for study as developing countries because they share many characteristics. Both are poor African countries struggling with the many common problems of the developing world, including foreign debt, shrinking export markets, corruption, elitism, ethnic strife and regional political conflicts. Both are relatively stable in their domestic politics yet there are powerful forces of disruption just near the surface as well. However, there are significant differences between the two countries, especially in terms of political ideology. Kenya has adhered to a state capitalist orientation whereas Zimbabwe is, in name at least, a Marxist-Leninist state. Also, Zimbabwe has had to deal with a different political inheritance than Kenya, one stemming from many decades of white supremacist government and a recent civil war. It only achieved independence in 1980.

One common experience does link the two states in terms of education: rapid expansion along with thwarted reform and increased demand for education in the face of limited resources. These difficulties in the implementation of reforms also beset school systems in the developed world. The focus of this study is an analysis of some cases of planned educational change in these two countries, and a comparative assessment of theoretical perspectives on planned educational change in the developing world.

1.1 BACKGROUND INFORMATION ON KENYA AND ZIMBABWE

Kenya: Political Background

Located in East Africa, Kenya is a populous country with a high birth rate (6.7%)[1] whose economy is very dependent on agriculture. Tea, coffee, and tourism are important economic sectors. Kenya has a moderately-sized industrial base but manufacturing exports are weak. It has a diversified ethnic population with four major tribal groupings and a strong Islamic culture on its coast. The principal languages are English and Kiswahili.

Kenya gained independence from Britain in 1963 after more than a decade of unrest and violence. Little effort had been made to prepare Kenyans for the task of nation-building that was before it. The colonial masters left in place a school system that was designed to give an excellent education to the elite, but which ignored any kind of national development for all. Jomo Kenyatta was the first Prime Minister and served until his death. He was succeeded by the current Prime Minister, Daniel arap Moi of the KANU party. Moi has sought to portray his administration as a mediating force between various ethnic groups but he has in fact been quite repressive. There have been few pretenses at democracy and the country has been ruled as a *de facto* one party state throughout the '80s. There have been accusations of high level corruption, but dissent is barely tolerated. The elections of January 1993 were a result of intense Western pressure exemplified by the threat of withdrawal of IMF fiscal support. Moi won a tainted victory, but the expression of dissent now has greater legitimacy and latitude. The political climate is more open but the future is quite uncertain. The support that the regime enjoyed from the USA and Britain for its anti-communism has now faded. Other regional tensions beset Kenya including the influx of refugees from Somalia, civil war in Ethiopia, and the general economic slowdown felt world-wide.

Educational Expansion and Economic Development

In the spirit of optimism following Independence in the 1960s, with a new faith in science and industrialization, Kenya embraced the human capital development model enthusiastically. In essence, this model was based on the idea that educational expansion would lead to direct expansion of the economy. Rational planning and sufficient investment in education seemed sure to bring about a modern industrial state. Kenya therefore rapidly expanded its educational system for practical development reasons such as literacy and skilled labour for the new state, but also for political reasons to meet the newly raised expectations of its people.

Economic growth was strong in the 1960s, more than 8% per year in GDP, due mainly to improved agricultural productivity and an open investment climate.[2] However in the 1970s, since Kenya is not an oil-producing country, the rise in oil prices and other economic pressures like falling export prices, caused serious economic contraction at that time. This economic slowdown served to discredit the human capital model. It was clear that publicly funded education , while significant, could not power economic growth alone. The economy has remained fragile up until the present time. In response, the government has been forced to resort to strong measures such as a currency devaluation in 1982.

Current Economic and Social Indicators [3]

Population: 24.8 million

Birthrate: 6.7% per year

Labour Force: 81% agriculture
7% industry
12% services

GNP per capita $370 US

GDP Growth Rate:	1965-73	1973-80	1980-91	1990	1991
% per year	8.7	5.4	4.4	5.0	2.2
Inflation Rate:					
% per year	2.8	14.3	10.0	11.7	14.8

Balance of Payments (1989): -587.5 (millions of Kenyan shillings)

Percentage of Budget for Education (1989): 19.8; for Health: 5.36

Zimbabwe: Political Development

Zimbabwe is a landlocked country bordered by Botswana, Zambia, Moçambique, and South Africa. It is mainly an agricultural country with strong exports in tea, coffee, beef, and minerals. Its economy has been relatively strong but it has suffered through two serious droughts in the past decade, and indirectly from costly civil wars in its neighbours. For instance, Zimbabwe was forced to defend its links 120 km through Moçambique to the Indian Ocean with its own army. The population is divided into two main ethnic groups, with a small European business elite. There is some economic fragility presently, due to the droughts and foreign exchange shortages, among other pressures. As a result, Zimbabwe has agreed with international donors to a structural adjustment program for the 1991-95 period to address these weaknesses.[4]

Zimbabwe has had a unique history among nations that have experienced colonialism and subsequent independence. It was ruled from 1890 until 1980 by a white supremacist political structure along the lines of that seen in South Africa. Originally an economic annexation by the British South Africa Company and Cecil Rhodes (hence Rhodesia), Zimbabwe realized responsible government for Europeans in 1923. However, all areas of life were segregated including land, employment, education and political franchise. Expenditure for African schooling was a fraction of that for whites, and generally only mission schools offered education to Africans. In 1965, ironically a period characterized by Africans taking control of their own affairs, the white government declared permanent unilateral control of the constitution. The Prime Minister, Ian Smith, stated there would be no majority rule for a thousand years. Although this was the formal rejection of African political aspirations, it was a continuation of the systematic suppression that had begun decades before. Between 1965 and 1980 there was a civil war which cost over 30,000 lives. There were atrocities committed on both sides, but the whites became infamous for their suppression of human rights through detentions, forced removals and brutality.

By 1979 a combination of moderate guerrilla success, an economic boycott, and an embattled white leadership led to internationally-sponsored peace conferences, which in turn led to black majority rule in

1980. Robert Mugabe, leader of the Shona political group (ZANU), became Prime Minister. He was returned in two subsequent elections, but the Opposition has generally been the minority tribe, the Ndebele. Since the 1990 elections a small Shona opposition party has also been grudgingly tolerated. Mugabe, though formally and rhetorically a Marxist-Leninist, has allowed a centrist market capitalism to flourish. He has also pulled away from notions of the one-party state floated in the late 1980s.

Educational Expansion

In a move similar to many other African states, Zimbabwe quickly expanded educational opportunities based on the European model. The Cambridge certificate system was continued and the government assumed financial responsibility (mostly wages) for universal schooling. Former white elite schools were desegregated, and many new schools and teacher training institutions were built. The stratification of good schools (and good results) over poor schools became very clear in a few years. Presently Zimbabwe is on the brink of severe educated unemployment.

Current Economic and Social Indicators [5]

Population: 9.8 million

Birthrate: 2.8% per year

Labour Force: 72.8% agriculture
10.5% industry
16.7 services

GNP per capita: $690 US

GDP Growth Rate:	1965-73	1973-80	1980-91	1990	1991
% per year	9.5	-0.3	3.6	2.2	3.6
Inflation Rate:					
% per year	2.1	9.9	14.1	17.4	24.3

Balance of Payments: (1989) +$48 (million Zimbabwe dollars)

Percentage of Budget for Education: (1989) 23.4; for Health: 7.6

1.2 HISTORY OF EDUCATION IN KENYA AND ZIMBABWE

Kenya

The dominant theme in the history of education in post - Independence Kenya has been the continuous expansion of schooling for the general population, something which had long been denied under the colonial regime. Education before independence was primarily aimed at providing lower level administrative workers some vocational training. Subsequent to independence there have been several waves of expansion, but these have generally been quickly dampened by fiscal limitation. The four reforms presented in this study also correspond to this pattern of expansion and then contraction.

Kenya experienced a very rapid expansion of its education system. Soon after independence the government was spending above 30% of the budget on its school system.[6] This expansion continued right through the 1960s and '70s. Between 1967 and 1977 944 secondary schools were added.[7] Kenya also made great strides in the vocational college and teacher training areas, opening up several important institutions.[8] The Ministry of Education made conscious attempts to "Kenyan-ize" the school system, for example, by increasing the percentage of Africans in so-called high cost schools (former colonial elite schools) from 30% in 1966 to 65% in 1969.[9] Also attempts were made to reduce the early dependence on expatriate personnel. Expansion also occurred at the higher levels. More programs were added and the University decided to adopt a more specialized academic format for its degrees in anticipation of the diversified economy to come.[10] Teacher training institutions grew in number and by 1992 there were three new universities.

Parallel to the government's efforts there was a large growth of self-help, or Harambee, schools which were largely community financed. In 1968, out of the 702 secondary schools, 245 were Harambee. These schools usually were found in more rural areas and the physical labour and materials for their construction were provided by the local communities. The government has had a varying attitude to the Harambee movement, at times becoming quite involved as advocate and fund-raiser, but later speaking out against it as a political threat. Eventually the sheer demand for schools has allowed Harambee to exist and the state

often provides the key support of teachers' wages. This situation was to some extent fostered by a philosophy of user-pay meritocracy adopted by the ruling party.[11] In brief terms, this is the principle that only those who merit opportunities, or who can organize themselves to pay for them, shall be given chances to advance. It values self-sufficiency above improving social equity, and puts the onus on individuals, not the government, to effect change.

It was not long before the economic limitations of this massive spending were felt. Budgets for recurrent expenditures shrank and the human capital model lost credibility. Outside economic forces clearly were having effects. Like most developing countries, Kenya suffered an economic decline starting in the 1970s, yet the rate of growth of primary schools was maintained. By 1983, Kenya's budget allocation for education was only 22% for both capital and recurrent expenditures, representing quite a decline since independence.[12] By 1989 it had sunk to 19.8%,[13] with much of the capital expenditure in education provided by foreign aid. The costs of education rose. There were many reasons for this: greater teacher wages due to higher qualifications, increases in textbook costs, greater material costs, and simply, greater numbers of students in more and more areas. The resolution of regional disparities and the reduction of elitism were also proving beyond the capability of the government to support as can be seen in the 1975 school enrolment ratios: in Nairobi it was about 90% of eligible children versus 35% for some rural areas. [14]

The government responded to these difficulties with a two-pronged plan. It abolished fees at the primary level, and it funded low-cost boarding schools in the arid regions where enrolment was low. The stated goals of the plan were not to achieve equal income for all, but rather equal opportunities. It was explicitly recognized that "differences needed to be rewarded."[15] This allowed local authorities to begin charging new fees such as an equipment levy and boarding costs. In certain districts the costs of schooling actually quadrupled.[16] The result, however, was even greater regional disparity *and* an affirmation of a user-pay system. These actions provided a clear context for the growth of Harambee schools which were privately funded. Unfortunately their low academic success rates generally exacerbated the disparities.

Popular demands for education remained high, however, but the contraction of opportunity continued. For example, in 1987 there were 160,000 students who entered Form I but 175,000 eligible students were denied places.[17]

In an effort to respond to growing demands for reform, the government attempted to re-structure the entire system in 1985, adding a year to primary school, reducing secondary to four years, and increasing the proportion of practical, scientific, and vocational subjects each student must take. This became known as the 8-4-4 program, one of the cases under review in this study. Unfortunately the social indicators of regional disparity and unemployment have remained essentially the same, and there has been intense criticism of the new structure. However, schooling remains a very high priority for Kenyans, and it was a volatile issue in the recent elections.[18] Nonetheless, it hasn't changed substantially in its methodology, curriculum style, organization or social function for over 25 years.

The 8-4-4 program was an attempt to restructure the whole to give eight years of primary schooling, followed by four years of secondary. A few graduates might then enter post-secondary education for four years, hence the name 8-4-4. The previous 7-6-3 system had been widely perceived as elitist and overly academic. The new program would have a large component of science and vocational subjects aimed at better preparing students for the modern Kenyan economy. The implementation of 8-4-4 was heavily criticized in some quarters for being poorly administered, and the new curriculum was faulted as being unrealistic in its demands given the poor implementation. 8-4-4 has been reviewed and modified recently but strong opinions about the unfairness of Kenyan education are still common.

The other case study from Kenya was called SMEA, or Science and Mathematics of East Africa. It was a reform of the mathematics curriculum originating in elite schools at the time of independence. It was implemented on a small scale at first and developed through a network of expatriate teachers. It was modelled after a British program, and was supported to a large extent by foreign resources. Even when these were withdrawn,the spread of the program continued, eventually by direct mandate of the Ministry of Education. It was abruptly abolished

in 1980 by Presidential decree perhaps as a response to criticism that it was ineffective and inappropriate.

Zimbabwe

The history of education in Zimbabwe has followed more or less colonial patterns, but perhaps was even more extreme in its segregation and deprivation of Africans than in Kenya. The white elite had always seen itself as permanent in a way more profound than the "tour of duty" administrators in other countries. Every effort was made to keep the expenditure on African education low and the emphasis on economic exploitation high. A large pool of unskilled labour was needed, not graduates who would compete in the white sphere.[19] Expenditures for African education actually dropped from £0.50 per child in 1901 to £0.22 in 1920. In 1926 the government was only providing 10% of the cost of what little African education was available. The rest was assumed by missionaries.[20] Schooling was compulsory only for whites by the 1930s. There was a huge difference in expenditure for each group. For example in the 1950s it was £126 per head for whites, but only £6 per head for blacks.[21] In 1962 the budget for black (but not white) education was permanently pegged at 2% of the GNP.[22] These trends continued right up to the late 1970s even though the white government did make some superficial reforms.[23] The segregation had all the expected effects. For example, nearly all white and Asian children completed form IV but only 3.7% of Africans did.[24]

With independence in 1980 came large changes in all areas of education, including expenditures, curricula, teacher training and school-state relations. There were several different goals articulated for these changes: to abolish racialism in education, to promote national unity, to develop human capital for industrialization and to improve the standard of living for all through knowledge and literacy. There was a massive expansion of schooling starting with free primary education for all. For example, 20% of grade 7 school leavers entered form I in 1979 but 78% did by 1986. The number of primary schools had doubled by 1986 and secondary schools had increased seven fold.[25] Expenditures as a budget percentage were dramatically increased to average around 18% as compared to 11% in 1979.[26] Teacher training

institutions doubled in number.[27] As well, large numbers of expatriate teachers, particularly in sciences and vocational studies, were recruited. Many schools were forced to accept a certain percentage of untrained teachers because demand was high and many of the qualified teachers preferred positions in urban schools. In 1985 there were 47% and 25% untrained teachers in primary and secondary schools respectively.[28] As well, the pupil-teacher ratio moved above 44:1 from 20:1 in 1980.

Like Kenya, Zimbabwe has retained the classification systems for schools and the differential funding scheme used by the previous regime. Not surprisingly, there are considerable differences among group A (urban, former elite), group B (urban, former government African schools), private, and rural schools. For example, group A schools have 88% trained teachers but rural schools have only 44%.[29] The 1984 pass rate (five O level passes) for urban schools was 30% but only 18% for rural government schools. Even more telling were the rates for mission and private schools which were 45% and 57% respectively.[30] These schools, especially those sponsored by the missions, charge high fees, which contributes to a pattern of elitism that is growing in Zimbabwe. The government regulations are that 60% of students in the former elite white schools be black, but still the fees are prohibitive.[31] The longer established schools tend to have better facilities, a better pupil-teacher ratio (30:1 vs. 49:1)[32] and better staff, and so are better able to handle the large fluctuations in funding and enrolment that rapid expansion has caused. The great achievement of Zimbabwean education should not be missed though: although the percentage of passes has dropped for all schools, a much larger absolute number of passes has been achieved in a relatively short time, from 4,008 in 1981 to 14,566 in 1984.[33]

In much the same way as Kenya, but in a more compressed time frame, the expense of this expansion has come to be a great burden for the state. With enrolments projected to be above 1.6 million by the early 1990s, and with the number of teachers required for them being 59,000,[34] and given the current world wide recession, Zimbabwe is facing serious difficulties in the path it has chosen for its school system. A diversified economy powered by educational expansion has not arisen. By

1988 nearly 300,000 students were entering secondary school vainly expectant of a good chance at passing "O" levels and getting the few good jobs that might follow.[35] As new teacher programs begin to come on stream, the wage component of education costs is swelling. For example, from 1981-83 this cost increased by nearly 12% but Zimbabwe's increase in GDP was about 3.5%. In the tertiary education sector costs are very high, about 7.3 times that per student in the secondary sector; the recurrent costs are about 90% salary.[36] The government is now considering several politically difficult options from varying class sizes to changing the transition ratios between primary and secondary schooling.[37]

The two cases from Zimbabwe in this study were called ZINTEC, or Zimbabwe Integrated National Teacher Education Course, and ZIMFEP, or Zimbabwe Foundation for Education with Production. The former was a new national teacher training scheme put in place to meet the huge increase in demand shortly after independence. It used existing training institutions and expertise co-ordinated by a national distance education centre. The program gave most of its training through year long practise teaching stints. It did provide large numbers of teachers with a lower level of qualification, but demands still outstrips supply.

The latter program began as a small scale innovation which based schooling on an integration of academics and production activities, mostly agricultural. Its original goals included the radical redesign of Zimbabwean education along socialist lines. It enjoyed high level political support as well as links with NGOs and the co-operative movement. It has not expanded much beyond its early scope of eight secondary schools, and appears to have been politically marginalized.

Summary

In both Kenya and Zimbabwe several attempts have been made to reform the school system, to make it more accessible, to match the needs of the economy, and to make it more national in character. In general these attempts have been problematic, either because they did not achieve their goals or because they actually exacerbated the problems they set out to address. The four reforms considered in this study demonstrate these trends clearly, and highlight the great difficulties

educational reformers face in the developing world. The case studies are concerned with four very different reforms from mathematics to exams to education with production to teacher training. As well, the case studies range chronologically, from the 1960s to the present, and from a capitalist to a socialist ideological context. Yet all have similar elements in their thwarted implementation such as a lack of long term support for each reform and arbitrary decision-making.

1.3 Purpose of Study and Research Questions

The purpose of this study is to examine these reforms, first, through a historical description of each reform, and second, through a comparative assessment in the light of the two opposing conceptual perspectives, the management and the world systems perspectives. In doing so two levels of analysis be presented: a) in-depth examination of each of the two reforms in Kenya and Zimbabwe, and b) an assessment of the merits of each of the two perspectives in explaining the problems and prospects of planned educational change. The specific research questions are:

1. To what extent were the goals in each case of planned educational change achieved?

2. Which theoretical perspective, the management perspective or the world systems perspective, provides a more comprehensive framework for explaining the outcomes of the four educational reforms?

1.4 Rationale

In the field of comparative education, much attention has been focused on the understanding and improvement of education in the developing world. Many political, economic, and social problems face the majority of the world's population who live in the developing world, and education has traditionally been looked to for solutions. In the

developing world governments face constant pressure to address economic disparities, stagnant industrialization , nationalism and internal dissent, and other social problems. As education is widely seen to have an effect on these critical issues, and because the education system is an institution largely within government control, the demand for and pursuit of educational reform is an ongoing phenomenon.

Many efforts have been made to reform school systems in developing countries, with varying degrees of success. Unfortunately reform efforts are often thwarted for a variety of reasons, from organizational problems to financial constraint to political resistance. Given the often severe economic limitations of many developing countries, the use of scarce resources and national energies on reforms that have low chances of success can be disheartening.

In the field of comparative education case studies and analyses of specific reforms abound. Information is available from a wide variety of sources such as the ILO, the World Bank, national universities, and governments themselves. Yet rarely is a comprehensive analysis attempted that theoretically links the features of failed reforms which are widespread in the developing world. As C. Adick argues, what is needed is a "truly comprehensive and theoretically sound approach towards understanding the broader and long-term historical and societal changes with which the origins and expansion of modern education were and are everywhere involved."[38] There appears to be a need to get beyond a country-specific and technocratic orientation of educational analysis in the West. There has been a tendency to study reform efforts in the developing world by categorizing them into singular topics such as 'education and neo-colonialism' and to consider education systems there as fundamentally different from Western ones.[39] As Ginsburg et al. point out, usable paradigms for the understanding of reform are needed. These paradigms should not be purely deterministic however, because they need to reflect both local *and* global political, economic, and cultural conditions.[40] A historical descriptive study which delineates and applies specific components of a theoretical perspective has the advantages of consistency and broad scope.

Two schools of thought currently stand out. The first one, which for the purposes of this study will be called the management

perspective, posits that the main obstacles to successful reform lie at the local level. It seeks to elucidate the myriad dynamics of planned educational change in a rational and methodical way. Rondinelli, a strong proponent of this viewpoint, provides a long list of management problems to consider such as the involvement of beneficiaries, imprecise goals, inadequate data for planning, weak incentives, poor knowledge of cultural conditions, and low levels of administrative capacity.[41] The attraction of the management perspective is manifold. Firstly, it attempts to systematically consider factors which affect reform which in turn can lead to the construction of a usable body of knowledge. Secondly, it accepts as a first premise that local situations always vary, which seems sensible given the variety of cultures, economies, demographics, and geography found in the developing world. Thirdly, it provides some practical steps to policy making which can be of use to large institutions like the World Bank which sponsor and direct planned educational change.

World systems theory offers another perspective which posits that modern education systems are transnational state structures which, as Adick (1992) and Fuller (1990) have pointed out, have become strikingly similar throughout the developing world. From this perspective, states often turn to educational policy as a means of responding to global trends and to forces within their own national political economies. Ginsburg et al. (1990) have noted, for example, that in the midst of economic recession, states tend to devote attention and resources to educational expansion and reform. In general, the world systems perspective offers three broad considerations of educational change. Firstly, it demonstrates commonalities in reforms and seeks to find political cause and effect relationships for them. Secondly, it accounts for the effects of global economic factors in educational change, not just budgetary limitations. Thirdly, it acknowledges the influence that multinational institutions have on the scope and direction of planned educational change. As Samoff has demonstrated, for example, the World Bank has a profound influence on educational policy making in the developing world because it is not only a major financial backer of research, but is also a significant research institution in its own right.[42]

The two theoretical perspectives under consideration are quite different in their orientation and form an interesting dialectic. On one hand, there is examination of school reform at the micro or management level, and on the other, at the macro or world systems level. They seem on the surface to be essentially exclusive in their explanations of the problems and issues related to educational change. A key aim of this study, therefore, is to examine the two perspectives by drawing upon their different interpretations of four specific educational reforms. While previous empirical studies of these educational reforms have been conducted, none has provided a broad conceptual framework within which the theoretical linkages among the cases can be demonstrated. This study will attempt to do so, but will go further by providing two conceptual frames of analysis. This will facilitate a descriptive analysis of the four reforms and a critical discussion of the factors which affected their processes of implementation. In addition, however, by considering two theoretical interpretations of the same educational changes, the study will comparatively assess the relative comprehensiveness of the management and world systems perspectives of planned educational change.

1.5 Methodology

It should be recalled that this study juxtaposes a descriptive historical analysis with a comparative analysis of two theoretical perspectives. There is no basis for arguing that one perspective elicits more information than the other. Rather, theoretical conclusions are derived from assessments of relationships observed in these educational reforms.

A thorough review of the literature of planned educational change was undertaken. Two major theoretical perspectives began to stand out, the management and world systems perspectives. Some key terms emerged from a review of the literature, and this process was enhanced by the experience of writing the research proposal and its defence. For the management perspective a central theme was that of *decentralization* and so the work of Rondinelli began to be seen as the quintessence of this viewpoint on reform. For the world systems perspective the difficulties of the *fragile state* were clearly an important dynamic, and so the work of Fuller was of special interest.

Data collection and preliminary content analysis

Although it was not possible for logistical reasons to interview the key personnel involved in the reforms chosen, an exhaustive search of the literature was completed. At the same time wider background research was undertaken in such areas as the general history, politics, and economics of Zimbabwe and Kenya. A collection of information about each of the case studies was completed from a variety of sources including books, refereed journals, NGO reports, news articles, and discussions with those familiar with the reforms. The library resources of the University of Ottawa, Carleton University, and IDRC provided access to a wealth of pertinent information. A well documented history which included the origins, goals, and implementation of the reforms was written. It was important to establish, as much as it was possible within the scope of this study, a factual record of the events which could then be interpreted from each of the theoretical perspectives.

Content analysis and theoretical applications

Each theoretical perspective has several components that can be considered together in a comparative descriptive and historical analysis. In order to study the theory, it needed to be applied in case studies that had significant differences among them in terms of the cultural, social, and political contexts. The four reforms, SMEA, 8-4-4, ZINTEC, and ZIMFEP, were chosen for their variety in content, scope (two were very large scale and two were relatively small), historical timing (early independence to the present day), and different cultural and political contexts. The four cases shared three characteristics: they were generally unsuccessful in achieving their stated goals, they involved a large variety of actors, and they were initiatives of the state. Also significant was the fact that there was a large amount of information available about them, not just one or two articles.

A set of key components of each perspective was developed which could then be applied in a systematic way to each of the case study histories through a series of operational research questions. The questions themselves evolved during the compilation and organization of the evidence. A written form was devised with each of the questions

listed, and the cases were reviewed using this form in order to increase consistency. The final operational research questions were:

Management Perspective:

1. Was the reform affected by a failure to localize decision-making or attempts to centralize it according to national standards?

2. Was the reform characterized by a dependency on metropolitan values?

3. Were the managers of the reform consultative i.e. did they adjust to internal political resistance and bureaucratic realities?

4. Were the important contextual factors considered?

5. Did the reformers use any form of contingency analysis in implementing the reform?

World Systems Perspective:

1. What evidence was there that the fragile state, threatened by demands for changes in the political and educational systems, sought to use the reform to maintain its own legitimacy?

2. Was the institution of school "decoupled" from the state?

3. Did the state make use of the modernity myth, especially as a rationale for expansion of the school system in the face of economic limitations?

4. Was there evidence of significant international influence on the path that the reform took?

5. Did the reform incorporate the contradiction of appeasing the mix of political interests faced by the state which in long term resulted in a deeper educational and political crisis?

Once the theoretical perspectives and the case histories were assembled and clarified, the theory was applied to the evidence. Each perspective was applied without reference to the other so as to see as clearly through each theoretical lens as possible. The ultimate objective was to compare the comprehensiveness of each theoretical perspective, not to make claims of validity along the way. Therefore no documentation was considered necessary in the analysis section, the historical facts and theory components having been well documented previously.

The answer to research question #1 was arrived at by a comparison of the goals and results in each case study. This step was an essential one though because it allowed the comparison demanded in research question #2. A determination of which perspective was more comprehensive involved considering whether either perspective elucidated causes for observed effects and whether either perspective provided a broader understanding of planned educational change. To use the words of Adick, did it allow us to "describe, analyse, and understand...structurally similar yet socially differentiated and ideologically distinct" education systems?[43] The concluding chapter is devoted to a comparative assessment of the two perspectives.

Limitations

There were limitations to this methodology though. An important limitation was the fact that no direct field work was possible due to logistical constraints. It should be noted that while field work has certain advantages in terms of obtaining primary data, it also requires a greater effort in sorting out relevant information especially from government sources and individuals who are personally involved in the cases. To address this limitation an exhaustive search of information from a wide variety of secondary sources was undertaken, as can be noted above in the *data collection* sub-section. Another limitation of this methodology relates to the natural variations in history of these reforms. Some of the content of certain reforms pertained to some key theoretical components more than did that of other reforms. However, on the whole there was useful information elicited by each question from all the reforms, though some gave a little more than others.

1.6 Outline of the Chapter Contents

Chapter one provides a introduction to the problems of planned educational change in Africa and some background information on Kenya and Zimbabwe. As well, it presents the rationale and methodology for the study. Chapter two gives a detailed historical account of the four case studies with some interim conclusions about to what extent each reform achieved its stated goals. Chapter three is a literature review centred on the two theoretical perspectives. It provides summaries of the key

components of each perspective which were used to draw up the operational research questions. Chapter four is a comparative analysis of the four cases studies from each of the two perspectives. Chapter five presents conclusions about the comprehensiveness of each perspective as well as some implication for planned educational change which follow from these conclusions.

1.7 Notes for Chapter One

[1] World Bank 1992 p. 293
[2] World Bank 1992 p. 293
[3] Figures for both Kenya and Zimbabwe are drawn from World Bank 1992 and IMF 1990 & 1991
[4] World Bank 1992 p. 593
[5] Figures for both Kenya and Zimbabwe are drawn from World Bank 1992 and IMF 1990 & 1991
[6] Court, D. p.54
[7] Lillis 1985b p. 81 footnote
[8] Lillis & Bray pp. 371-375
[9] Lillis & Bray p. 362
[10]. Furley and Watson p. 333
[11] See Court for an excellent comparison of Kenya to Tanzania on this point.
[12] Macharia p. 11
[13] IMF 1991 p. 60
[14] Court p. 42
[15] Court p. 45
[16] p. 204
[17] Bowser p. 12
[18] Daily Nation 9 Jan. 1993
[19] H.S. Keigwin, a Native Affairs Commissioner said in 1921 that education should "stimulate effort amongst the people, to put purpose into their lives and to develop such skills in industries that did not offer direct competition to whites." Zvobgo p.323
[20] Zvobgo p. 324
[21] Zvobgo p. 326
[22] Dorsey p. 41
[23] For a good overview see Dorsey pp. 42-45
[24] Harber p. 164
[25] Dorsey p. 46
[26] Ibid p. 52
[27] Dzvimbo p. 18
[28] Dzvimbo p. 18
[29] Dorsey p. 56
[30] Dorsey p. 55
[31] Zvobgo p. 337
[32] Zvobgo p. 338
[33] Dorsey p. 55
[34] Zvobgo pp. 345, 347
[35] MacKenzie p. 344
[36] Dzvimbo p. 26
[37] Zvobgop. 349
[38] Adick 1992 p. 242
[39] Adick provides some strong arguments that are world-wide patterns to education
[40] Ginsburg et al 1990 p. 275
[41] Rondinelli 1982 passim
[42] Samoff 1993 p. 191

[43] Adick 1992 p. 241

Chapter Two

Descriptive Summaries of Four Educational Reform Programs in Kenya and Zimbabwe

2.0 INTRODUCTION

The case studies are presented here as histories with as much detail and documentation as possible. Included in these descriptive summaries are the contextual origins and specific goals of each of the four reforms. Processes of implementation and the outcomes of the reforms are also described in this chapter.

2.1 THE SMEA REFORM PROGRAM

The Science and Mathematics Program for East Africa, or SMEA, was an innovation with its roots in the modernity ideas of technological industrialization in the 1950s and '60s. It was a relatively short-lived program. It was formally adopted in 1970 at the primary level which in turn necessitated its adoption at the secondary level in 1978 when the students reached Form I. Just three years after its introduction in secondary schools, it was abolished by Presidential decree and the curriculum was mandated back to the previous mathematics program. Throughout its existence SMEA was marked by strong and highly varying reactions from educators, academics and the general public.

Origins of SMEA

When Kenya gained its independence in 1963, there was a general thrust in the educational arena to 'catch up' to the developed world. It was perceived that colonialism had held Kenya back from enjoying the benefits of modern technology and mass education. There was a greatly increased faith in all things modern and in the scientific paradigms of the West. There was particular optimism in the area of labour planning as a means of achieving industrialization. There was consequently a rapid expansion of the school system and an effort to 'Africanize' Kenya's institutions. However, as was often the case with newly independent countries, there was a shortage of economic resources and the skilled personnel to complete this task. In many instances there was simply a re-naming of organizations to give the appearance of nationalization. In fact they often carried on much as before, staffed

to a large extent by expatriates. For example, such was the case with four of the former white elite schools.[1]

In this race to become modern it seemed only natural to many of the early reformers that ideas and programs from the West would be useful. The presence of many expatriates in the institutions also engendered this perception. Kenyans had lived for decades mostly watching the economic and epistemological power of modern education at work but not participating in it. In historical terms it was an era of great scientific leaps such as manned space flight, modern computers, and developments in medical science. The new prosperity of the middle class in the West seemed to hold great promise for newly self-governing Africans as well. Much of the money for the construction and staffing of educational institutions came from foreign donors like UNESCO, UNDP, and the ILO, and through initiatives like the Peace Corps. Very often higher education was completed at institutions overseas and with the support of foreign organizations such as the Ford Foundation. It was a period of "unprecedented educational assimilation of the South to the institutions and aspirations of the North."[2]

The strong connection of Kenya to Britain before and after independence was a key factor in introducing SMEA. It originated as a semi-private mathematics curriculum project headed by Professor Bryan Thwaites at the University of Southampton. Entitled School Mathematics Project, or SMP, it was originally an effort to encourage and modernize the teaching of mathematics. It favoured new methodologies such as group study and guided discovery. It was small scale at first and the curricula were field tested by teachers involved in the project. It gained attention and support from teachers, and the team soon was producing texts and other educational materials such as cards and booklets. By 1964 the first O level courses were in place, and by 1977 nearly 63,000 candidates (or 20% of the national entry) were using the new system.[3]

There were similar developments of modern math teaching in the United States, including one called the Educational Services Incorporated African Mathematics Program. It was later known as the Entebbe Mathematics Program. It was quite influential in the adoption of SMEA. All these programs had the theme of making math less tedious and

more self-motivating. "There was openness in the approach, humour, and a place for learning by discovery."[4] Thwaites emphasized that SMP was drawn from and tested through direct practical experience of teachers in the field. This gave the whole program a tone of modernness and practicality, and of shrugging off the 'sterile burden of tradition' as some teachers saw it. It was not surprising then that the newly independent Kenya would find it appealing.

Goals of the Program

The goals of the SMEA program did not emerge as formally as those of the 8-4-4 program (see below), which was designed for a specific purpose and then mandated. SMEA grew out of an initiative by teachers at three elite schools in Kenya who were aware of the development of SMP. SMP itself grew from a small project initiated at elite schools as well. Since there was also interest in Uganda, a network of mainly expatriate teachers was formed with the purpose of keeping up to date with the latest U.K. innovations. This led to a conference of educational inspectors from Kenya, Tanzania, and Uganda in January 1964. It was decided to design a syllabus for the three countries, and it was accepted by the Cambridge examining syndicate. By January 1965 Book 'T', a SMP text, was approved and SMEA began to be used by a minority of schools, mostly elite ones.

The point is made by Kenner[5] that one of the goals for education in those early days was the rapid expansion of opportunity. Therefore the ease of adoption that an equivalency-oriented approach like using SMP materials offered was appealing. There was also a sense that SMP was past the experimental stage and that expatriates and those with foreign training had sufficient expertise to lead Kenya to the most modern curriculum. Notions of cultural imperialism or pedagogical appropriateness were not of primary concern at this stage.

In sum, the goals of the SMEA program for those who first adopted it were to keep up to date with the latest educational programs, and to retain contact with the values implicit in recent innovations in the teaching of math. These values would include modernness, student-centred and engaging curricula, practicality, and excellence. A more subtle

long range goal was to help usher Kenya into the modern scientific age associated with the opportunity of independence and industrialization. SMEA also had the overall goal of developing a modern mathematics program for Kenya based on 'guided discovery' paradigms. It should be noted, however, that it was implemented primarily through voluntary adoption, not Ministerial mandate. Therefore, it should not be presumed that SMEA had nation-wide objectives

Implementation of SMEA

Early use

The implementation of SMEA had three distinct stages, as articulated by Lillis: materials development, mass dissemination, and national mandate.[6] The number of schools using the SMEA materials grew steadily from a few in the mid-60s to 1,354, or over half the secondary schools, by 1980.[7]

The first phase of SMEA (initially called SMPEA) involved the development of specialized materials and teacher guides to fit the East African context. For example, the five year SMP system had to be condensed into four years and appropriate language changes were needed such as explanations of terms like "cricket". The writing team was actively supported by SMP in Britain and worked through the Nairobi Mathematics Centre and the Kenya Institute of Education, or KIE. The bureaucratic decision-makers were African but the expertise was expatriate. Draft Books I to IV were produced from 1966 to 1968.[8] By this time 65 schools in Kenya had adopted the syllabus on a voluntary basis. They were generally within the network of original schools which had adopted SMEA and had access to the Draft Books and in-service by the development team. As well, these schools tended to accept the equivalency orientation of SMEA and the inherent values, norms and assumptions of those who promoted it. For example, it was assumed that there would be a high-quality pupil intake, good teacher availability, and a metropolitan outlook.

Inadequate resources and support

From 1968 to 1977 there was further growth in voluntary adoption. The definitive SMEA texts were completed, and an in-service program was initiated by SMP and supported by British Council staff, though controlled by the Ministry of Education Inspectorate. However, the program was dropped in 1972 due to lack of resources in face of the sheer size of the problem of in-servicing in provincial areas. This left a serious problem of information fragmentation. Large numbers of teachers, especially those in rural and low-cost schools, such as Harambee, were isolated from the network of change agents which had introduced the program, thus were left with inadequate training in the methodology of new Mathematics. The Inspectorate was also left unable to assess the effect of such inputs as expatriate expertise or the efficiency of the SMEA program.[9] When the SMEA Teacher Guides were finished, the department of secondary mathematics at KIE was closed, which reflected the KIE Director's view that SMEA was not a unified curriculum scheme but rather a materials development project. This decision had large effects in the mass dissemination phase.

Adoption and in-service problems

In 1970 it was mandated that modern mathematics would be taught at the primary level by January 1971. The program was developed by KIE and called the Kenya Primary Mathematics Program, or KPM. Although trials of the KPM materials had not been completed, and some schools did not have books for the final primary year until 1974, the new curriculum went ahead regardless.[10] The assumed natural outcome of this was that by 1978, when the first primary cohort reached secondary school, modern mathematics (i.e. SMEA) would be taught there as well. There were serious doubts as to how well prepared students would be for it.

This mass dissemination phase during the 1970s suffered from several implementation problems, including a lack of understanding of the diffusion processes of educational change. ìIt is suggested that the Ministry of Education equated *adoption* of the innovation at the system level with the *implementation* of the innovation at a classroom level"[11] There was inadequate teacher in-service and a tendency to rely on expatriate enthusiasm which did not filter down to African classroom

teachers who had different conceptualizations. Voluntary adoption with its sense of ownership and commonly held values had turned to coerced adoption. Schools at the lowest end of the educational spectrum, such as Harambee ones, had no preparation for this at all, in addition to having to deal with woefully inadequate facilities, books, and equipment.

By the late 1970s the criticism of SMEA grew more intense, at least partly because the quality of math teaching had suffered due to the implementation problems mentioned above. The urban-rural disparities that have always plagued Kenyan education seemed to be worsened by the new math program. Lillis argues that to a large extent the elitist character of the SMEA program and its metropolitan assumptions made its adoption in rural areas quite problematic.[12] There were calls for a 'back to basics' as there seemed to be a decline in numeracy among some students.[13] Eshiwani published a series of critiques indicating that students lacked basic math skills needed in science and technical work.[14] The new methodologies that SMEA advocated, which were born from the SMP program, opened the door to another criticism, namely that it taught math as a "literature" with its own internal rewards, not as a "language" with practical applications to describe reality. The KIE mathematics panel also noted that there was a discontinuity between primary and secondary math due to inadequate teacher preparation and varying use of untested materials.[15] There were also strong suggestions that SMEA had not been sufficiently contextualized, or as King puts it, "indigenised".[16] Likewise there was uncertainty as to whether the majority of the teachers actually comprehended the concepts they were to transmit?

Crisis and abolition

The unfeasibility of the coercive strategy was apparent for many observers before the decision to abolish SMEA came in 1981, but even so it came abruptly. With little more than a month's notice all secondary schools were to return to the 'traditional' syllabus. In many cases this meant taking long-shelved books back out and beginning again. There was no system of compensation for the expense of having switched to SMEA and now having to switch back. For students who had had three years of SMEA and were entering their exam year, there was a great deal of catching up

to do, and some were unable to adjust despite being strong students.[17] The arbitrary style of educational administration had become somewhat commonplace, and there was little to be done but carry on.

To sum up, the goals of SMEA to implement modern mathematics and adopt the SMP methodology to the Kenyan school system were not achieved. Furthermore, the program cannot be said to have fostered the emergence of a post-colonial Kenya which was up to date with the latest innovations in mathematics pedagogy and modern scientific thinking. In fact, SMEA may have set back these goals by several years because of the ill-will and confusion stemming from the government's use of coercive, arbitrary measures.

2.2 THE 8-4-4 SCHOOL RESTRUCTURING PROGRAM

One of the most far-reaching and ambitious educational reforms in Kenya was the so-called "8-4-4" program. The name 8-4-4 refers to the length in years a student is expected to spend in primary, secondary, and post-secondary education. Formerly the student would spend seven years in primary, six in secondary (four for "O" level and two for "A" level) and three in post-secondary. This re-structuring initiative has been controversial from the start. There have been criticisms from many sources, including teachers, students, opposition politicians, university professors and parents. It was even an issue in the 1993 election with calls made for a return to the 7-6-3 system.[18] The main themes of the criticism concern the arbitrary mandating of the reform, its poor implementation, and its failure to achieve its stated goals in the face of other pressing educational problems.

Origins of the Program

Kenya, like many newly independent countries, rapidly expanded its system of education. For example, from 1963 to 1984 the number of primary schools doubled and the enrolment increased fivefold.[19] There

was a high expectation that with the end of colonialism, with its racist and elitist ethos, there would be a profound upward shift in the quality of life for almost everyone. It was only a matter of building enough schools and carefully planning labour and economic growth. Unfortunately various factors conspired to thwart this dream, and many of the inequities from colonial times remained in place. In Kenya these included urban-rural and regional disparities[20], educated unemployment, the growth of an urban elite and dependent industrialization[21] which did not produce the diversified, job-rich economy envisaged by many.

Kenya had essentially retained the British system of schooling elite academic institutions, centralized administration, and the **A** and **O** level examinations. Criticism of this system grew more insistent over time, especially because the burden of financing was being increasingly borne by parents despite the abolition of primary school fees in 1974. The widespread Harambee school movement was also indicative of deep interest in education and its benefits, but considering the poor Harambee exam results, disappointment was growing. Many well qualified students were graduating at all levels of the education system but were unable to find places at the next level. In 1987, for example, there were 175,000 students who could not find places in secondary schools.[22] This was partly due to lack of physical facilities. As well, the economy was unable to absorb these students, who by the nature of their education (academic as opposed to skills) sought urban employment, rather than a return to the agricultural roots of their parents. Ironically, despite the numbers of students graduating from schools, Kenya still had skilled labour shortages.[23] As a result there was a growing call for more practical and vocational education, both to increase the returns to the economy from educational budgets, but also to match the curriculum to rural development. It was estimated that 85% of Kenyans lived in rural areas, and 75% of them worked in the agricultural sector.[24]

It was this last point that became a thematic focus. It was increasingly perceived that the highly academic curriculum was not serving students well, and that more relevant, practical content was needed. This notion fitted well with the government's meritocratic approach, which placed high value on self-sufficiency. President Moi

himself was on record as saying "differences should be rewarded"[25] Schools should therefore become more productive, which in essence meant more self-financing. Consequently, it became appropriate to congratulate schools on their fund-raising and productive work. For example, Jotham Olembo commended Egoji Teacher's College for becoming self-sufficient by agricultural fund-raising and hoped its graduates could "instil work values into students. Young Africans do not seem to have similar work values as their ancestors."[26] They should "learn the virtues of soiling hands in order to make a living." This way of thinking was also in line with the government's desire to develop poorer regions, and to reduce migration to urban centres.

The most direct origins of the 8-4-4 program lie in an initiative called the Presidential Working Party[27] which was mandated in 1981 to study the feasibility of establishing a second University. Its task was to address the shortage of places at the University for qualified candidates. On completion of the study, the commission recommended a shorter secondary cycle and a new University. (In fact by 1993 there were four Universities in the country.) The scheme was patterned on the North American model, perhaps partly because the chair of the Working Party was a Canadian academic. Further recommendations were that students would take ten subjects at the primary level and be tested by a new examination system called the Kenya National Primary Education Examination. At the secondary level students were to sit for the Kenya Certificate of Secondary Education or KCSE. The Kenya Institute of Education or KIE was charged with designing the new syllabi.

Goals of the Program

It naturally followed then that practical and vocational subjects became the focus in the final two of the eight primary school years in an effort to enhance and expand the agricultural sector. The primary goals[28] of 8-4-4 were ones that involved diversification and vocationalisation of the curriculum. These were summarized as follows:

> (a) *Need for more relevant curriculum.* The educational system hitherto followed by the country did not cater for the greater number of pupils enrolled. There is a need therefore for a practical oriented curriculum that will offer a wide range of employment opportunities.
>
> (b) *Technical and vocational training.* The 8-4-4 system, with its emphasis on the technical and vocational education, will ensure that the students graduating at every level have some scientific and practical knowledge that can be utilized for either self-employment, salaried employment or further training.[29]

An important result of this change was a need to restructure and re-organize technical training. This meant the provision of new facilities and expertise for vocational training and a new system for Kenya's technical schools. As well, more classrooms were required because of the additional year of primary school. There was an ambitious community-centred drive in 1985 to this end.[30] The existing polytechnical and training college institutions were re-aligned organizationally with the aim of increasing the national vocational training capacity threefold by the year 2000.[31] The goals explicitly included:

> (i) To extend training opportunities to meet the demands of those students who will terminate their formal schooling at the primary or secondary education cycles.
>
> (ii) To impart the necessary skills and attitudes as equipment for the individual's means to survival into Kenyan society.
>
> (iii) To develop practical skills and attitudes which will lead to income-earning activities in the rural or urban areas through self-employment as skilled operatives, artisans, craftsmen, technicians in the formal and non-formal sector.

(iv) To provide practical education and training skills which are responsive and relevant to Kenya's Industrial and Commercial development.

It should be noted that the attitudinal objectives have a clear message about accepting the virtues of rural life and seek to "instil in the children an appreciation for skilled manual work."[32] As well there may be a more subtle message that self-development in the rural area is a patriotic activity and that eight years of schooling was all most people needed.

Another key advantage to the 8-4-4 program that was often mentioned was the opportunity for more diversified curricula based on local needs and desires. This would allow better harmonization and rationalization of national vocational needs.[33]

Implementation of the 8-4-4 Program

Almost from the very beginning the 8-4-4 program has been fraught with controversy. Although the Working Party urged gradualism in the implementation (the costs exceeded $3.3 million the first year alone)[34] the program was mandated by the President and the Minister of Education. In early 1984 all doubts about feasibility were to be swallowed and the program was to be in place by January 1985. There was a lot of scrambling to prepare for this deadline, especially in light of the fact that all levels of the education system were to be affected. The existing stream of **A** level students still had to be processed through the system and shortly there would come a time when both the old and the new groups would be sharing the same facilities. Various committees and personnel were charged with managing this transition, but the necessary resources were in short supply. For example, 18,000 unqualified teachers had to be hired to teach the students in the additional year of primary school.[35]

Shortages of equipment and underqualified teachers

In February 1990 the first class under the 8-4-4 system graduated. There was a strong reaction to the lower exam results as compared to the previous A level results and a review was announced by the Ministry of Education. One of the weakest areas was science in which only 6% of the 104,271 candidates achieved a mark of D+ or higher.[36] The poor performance continues up to the present with especially poor results for girls schools.[37] This can at least be partly attributed to the fact that many of the new practical facilities lacked proper equipment and textbooks and that the new curriculum is seriously overloaded in terms of content. A study by Sifuna of the 8-4-4 prevocational subjects confirmed this. He concluded that the lack of basic resources such as workshops and labs had seriously handicapped the program. The fact was that the cost-sharing schemes of the government under 8-4-4 had exacerbated the rural-urban disparities, not opened new economic opportunities.[38]

Teachers were ill-qualified and poorly in-serviced. With so many new but unqualified teachers in the system the issue of instructional language arose. There have been complaints that local languages are spoken in school even though English is the language of the exams, and sometimes that only notes, not classroom instructions, are given in English.[39] Other commentators have noted that in many cases teachers taught only the theoretical portions of the practical subjects and it became academically fashionable to drill in these areas. The goal of turning away from irrelevant academics had been turned upside down.[40]

High Enrolment versus Fiscal Crisis

One of the most difficult implementation problems with 8-4-4 concerned the double intake of A level students and the new 8-4-4 group. Not only was it difficult to fairly compare exam results which are crucial to University acceptance, the huge numbers of students sorely taxed the physical capacities of the colleges. There are critics who suggested that this resulted from over-hasty implementation.[41] Once again the problem of qualified students unable to obtain places had arisen. In May 1990 President Moi intervened personally and directed that something be done to find room for about 3,500 students who had

been left out.[42] But by February of 1991 the Minister of Education announced that the intake of the previous year, 21,000, would be reduced to 10,000, thus provoking another flurry of criticism. In 1993 the number of Form One places has also been reduced, a direct result of the government's refusal to build more schools despite an increase in the population. Communities were forced to resort to Harambee style efforts if they wanted more facilities.[43]

The government has continued to show enthusiasm for user-pay systems, perhaps as a response to the ongoing economic constraint in Kenya. For example, it recently introduced a Pay-As-You-Eat system and other fee increases at the universities which led to student unrest. University closures as a result of student unrest are becoming a serious problem; some are closed months for at a time, significantly lengthening some students' programs. Ironically, in December 1992 the universities were being urged to run their activities in a "business-like manner" so as to generate income.[44] The political consequences of this are yet to be evaluated.

In fiscal terms the government is facing a crisis with wage expenditures for primary teachers reaching new highs. At the same time half of the development budget for education is going to provide new facilities at the universities. Funds for graduate research have been quite curtailed. As well, these institutions are experiencing serious shortages of academic personnel resulting in very large class sizes and recruitment of ex-patriate personnel.[45] At the lower levels there has been a shortage of funds to conduct in-service work on the 8-4-4 program for school inspectors. Yet according to the Chief Inspector of Schools there is consequently a great need to give teachers refresher courses.[46]

Government responses to the fiscal crisis

The government has now been forced to turn to foreign donors, principally the World Bank, for a $55 million project to overhaul the university system.[47] The restrictions on the size of the intake have another costly effect, that of the exit of qualified Kenyans to study overseas. For 1992/93 it is estimated that for Kenyan students in Britain alone the cost will be $8 million in scarce foreign currency.[48] Meanwhile school fees in Kenya are taking unprecedented leaps, sometimes

doubling in one year. In some cases, the high fees have become prohibitive for otherwise qualified students. For example, in Eastern province in 1993, 913 of 7,804 Form One students were replaced because of inability to pay.[49] The total of replaced students for all Kenya was 80,000.[50] Foster found that school fees are the largest single expense of rural households.[51] At the other end of the scale there is an increased interest in private high status educational institutions. Combined with those Kenyans studying overseas, this deepens the polarization of educational opportunity and the attendant economic stratification.[52]

Criticism and changes to the program

There has been a chorus of criticism in the Kenyan media concerning the implementation of the 8-4-4 program. Several commentators have suggested that 8-4-4 suffers from a marketing problem. It has been termed "ill-timed and poorly co-ordinated" by the Registrar at Kenyatta University. The Dean of Education at Nairobi University said that because of poor in-service teachers have become apathetic and even hostile towards 8-4-4.[53] Other academics and journalists have suggested that 8-4-4 was poorly researched to start with and was rammed into place for political reasons. ìAnybody who tried to give a realistic picture of the new system was branded a saboteur and anti-government agent."[54]

The effect of this criticism is difficult to evaluate. However, recent developments suggest that the government is trying to respond to these criticisms, especially those from KNUT (Kenya National Union of Teachers). For example, it has reduced the content load on the students.[55] In May 1993 the Ministry announced new guidelines for the KCSE exam requirements and issued a new booklet to clarify entry requirements to the tertiary level. The new system is very similar to the KCE format that 8-4-4 replaced. Now students may drop practical subjects, and are permitted specialization into subject clusters of science or arts. The O level exam had a similar rule that allowed a student to use his best six subjects in subject clusters. However, students must now take at least two science subjects, while the O level required just one.[56]

The education system will still need more reform to satisfy its critics. Many parents have demanded the dismissal of head masters and teachers whom they view as incompetent. Parents feel particularly justified in their anger because of their role as donors or shareholders in schools they have built and financed.[57]

Since KANU under Moi won the multiparty elections of 1993, 8-4-4 is here to stay for the present. But the apparent political liberalization with the existence of true opposition parties does not yet extend to the school system. It has often been alleged that in history and civics,[58] KANU and the presidency have been given excessive prominence.[59]

As a further illustration, consider the recent statement by the Education Minister indicated that opposition activists should not be allowed in schools and that he would sack any teacher who openly supported the opposition. He also instructed headmasters to implement the ruling party's manifesto and policies to the letter.[60] It is safe to say that the government is not presently inclined to view education and the 8-4-4 program as non-political issues.

In conclusion, the 8-4-4 program is now generally in place but is still the subject of hot debate and criticism. Its implementation appears to have suffered from economic constraints and crisis management. Its goals, especially those aimed at re-orienting students towards practical employment training and agricultural activities, have not been realized. The fact is that practical subjects are actually expensive to teach and the market for some of the new skills is minimal.[61] Opponents say that 8-4-4 has done little to address regional disparities, inadequate budgets, illiteracy, or general lack of faith in the education system.[62] The facts tend to confirm that little has changed in these areas since 8-4-4 was implemented.[63]

2.3 ZIMFEP, THE EDUCATION WITH PRODUCTION SCHOOLS PROGRAM

Since achieving independence in 1980 Zimbabwe has followed a socialist ideology. A symbolic cornerstone of this has been its Education with Production schools program, or EWP. An organization was formed to develop EWP called the Zimbabwe Foundation for Education with Production, or ZIMFEP, and it has enjoyed support from the highest levels of government. Expectations were initially quite high for EWP because it represented a radical but apparently viable departure from the colonial and capitalist structures of the past. Along with a massive expansion of the school system, the government was publicly committed to re-structuring the economy and re-socializing along more equitable lines. The education system seemed to be the logical place to begin this process, and ZIMFEP oversaw the establishment of eight specialized secondary schools. However, after 13 years the EWP schools and socialist curricula have not advanced much past the stature of their pilot stage, and in fact there are even signs of retreat from socialist curricula.[64]

Origins of EWP and ZIMFEP

The roots of ZIMFEP spring from both capitalist and socialist sources. The schools themselves were to be productive units, where collective efforts produced success in the marketplace. At the same time they were to create a radical departure in the political economy towards socialism. However, in any discussion of Zimbabwean socialism a paradox should be noted: there has always been a contradiction between the official ideology and actual state policy. The socialist revolution in Zimbabwe has a somewhat unique history for it has not sprung directly from an uprising of workers against class interests. ZANU, the ruling party itself, had not even adopted socialism until 1977. While the commitment of the government has always been strong, and the Cabinet itself is avowedly Marxist-Leninist, the actual progress of socialism has generally been more rhetorical than real. Nationalization of industry and massive land reform have been long delayed and/or effectively watered down.[65] All this has produced an ideological duality in Zimbabwe which has greatly influenced ZIMFEP.

In spite of all this, Zimbabwe has retained a great interest in socialist education. There are several important background influences. Firstly there were Julius Nyerere's ideas of "African socialism" which made a strong association between productive work and education. Most schools had a farm associated with them.[66] In neighbouring Zambia there were production units at all schools.[67] Several conferences on education, including the Brazzaville conference in 1978, and the Harare Conference in 1982, emphasized the ideas of linking education with production to assist personal and national development, to infuse positive ideas about rural life and manual labour, and to inculcate useful and relevant lifeskills.[68] The heavy support of Communist countries such as China and Moçambique during the liberation struggle also gave impetus to the ideas of rural socialism as a method of transforming society. Mugabe was perhaps affirming that political debt in 1981 when he asserted, "Our schools, our entire education system, must develop a socialist consciousness in our young people."[69]

The primary model for EWP, though, was the work of van Rensburg with the Brigades in Botswana. Writing from a class conflict point of view, he saw almost all economic and social structures as exploitative. There was a great need for a transformation of social consciousness to be achieved through linking social theory and practice. Ideally this should be done in an educational setting. "Education is thus recognized as a whole social process involving action and reflection across the range of human experience."[70] Education with production was supposed to have great benefits in pedagogical terms because it led to fuller conceptual assimilation. In social terms it linked workers with their own interests, which in turn gave them self-respect and built the local environment and community.[71] This new shaping of the consciousness was not a purely personal experience but reflected a larger social reality, and hence could transform society.[72]

On a practical note the work of van Rensburg from 1967 onwards in neighbouring Botswana with over 20 Brigade centres gave a clear model for the Zimbabwean planners to start with.[73] As well, there was considerable networking with BOTFEP (Botswana Foundation for Education with Production) and other NGOs in the co-operative movement. ZIMFEP was represented on a Southern Africa regional board.(This has since been

replaced by OCZIM (the Organization for Collectives in Zimbabwe), another co-operative NGO.)

Goals of ZIMFEP

The goals of EWP and its support organization, ZIMFEP, follow a fairly straightforward socialist line. In general Zimbabwean curriculum planners have at least rhetorically sought to raise a socialist consciousness in students. In fact it is even mentioned in the objectives for teachers in training.[74] Specifically ZIMFEP was intended to foster respect for both manual and intellectual labour, to adapt educational subject-matter to the Zimbabwean context and to increase employment, especially through co-operative means.[75] The ZIMFEP schools were to be linked closely to their communities for a variety of reasons. It would enable the schools themselves to become self-sufficient through productive activities appropriate to the local conditions. This would allow a mutually-beneficial channel of activity to exist between the school and the community. It would spread the ideas of socialism and co-operation, and provide school leavers with useful skills.[76]

The building of co-operative community organizations was a key theme emphasized by van Rensburg as well. The error of imposing authority structures and economic systems was to be avoided. "Training and education will thus not be introduced through the agency of an entirely new organization, but will rather be grafted on to an existing organization which is reasonably well-rooted and has a defined and acceptable place in Zimbabwean society."[77] This amounted to a two-pronged goal of democratization and promotion of societal change. In the words of one ZIMFEP headmaster, "it is revolutionary participatory democracy that we thirst for."[78]

One notable goal of the ZIMFEP program was to be an education project aiming "to develop an education system whose basis was scientific socialism"[79] and thus to the whole school system. As a start to this process ZIMFEP was to develop curricula that could be used on a nation-wide basis.[80] It was hoped that new modes of participation in decision-making resulting from the strong school-community links would in turn promote a new socialist orientation to society. The context for the development of a radically different curricula would then be favourable.[81] As an indication of the seriousness of this goal, ZIMFEP was set up by the Minister of Education, and the chair of the ZIMFEP

board was also Head of Curriculum Development at the Ministry.[82] ZIMFEP was frequently referred to as spearheading the socialist transformation of Zimbabwe.[83]

Implementation of the ZIMFEP Program

The first eight ZIMFEP schools and four attached primary schools were spread throughout the country and were established on former white farms. This was an ideological gesture. The first students were mostly former combatants from the liberation struggle, many of whom had gone well beyond school age in the camps in Zambia and Moçambique. There was a military style of administration at first and a heavy ideological content.[84] At the beginning too, there was a lot of physical work to do in the construction of classrooms and production facilities. Along with many of the ex-combatants came families and friends. Then in 1983 students other than refugees were admitted. By 1985 there were about 5400 secondary and 2000 primary students.[85] However, as of 1991 the ZIMFEP student population had not risen much above this level, constituting less than one percent of the total school population.[86]

ZIMFEP itself was set up as an independent organization to support the activities of the schools. This independence was seen to be crucial in avoiding the label of being a government apologist. Further, it was consistent with the philosophy of EWP that it should be run by local authorities. The Minister himself said, "I believed that such an organization would have more freedom to experiment and would not be a prisoner of the bureaucratic structures inherited from the past."[87]

Continuing Academic Bias

The students were to study the Cambridge O level syllabus as well as participating in production activities. At the beginning there was large scale farming, but by 1985 this had been given over to professional farm managers, and students only worked on small demonstration plots.[88] This balance between academic schooling, especially the liberal arts found in the Cambridge system, and productive work has been very hard to maintain for the ZIMFEP schools. It has been very difficult for students to pass five O levels and still find time for production activities. Within the

schools themselves, there is little difference between the academics taught there and in other Zimbabwean schools.[89]

As time has passed, the group of ZIMFEP students has become more diversified, with a much smaller proportion of ideologically committed ex-combatants. The new composition of the group is similar to other Zimbabwean students who desire O level certificates. The natural draw of credentialism has become apparent. Chivore found in a wide-ranging survey that education with production began to be seen as extra-mural because academic passes remained the key for upward mobility. He concluded that on the whole the ZIMFEP students actually have a negative attitude to practical subjects, and to co-operatives and self-employment. In addition they seemed to have little understanding of the ideas of socialism.[90] Although education with production became compulsory in all schools in the country, what this actually means from an EWP perspective remains variable. Schools were free to implement this as they saw fit. Many saw EWP as a source of cheap labour to improve the schools and save money. Without question interest in academic subjects and entrance to the next level is still very high.

Material and Personnel Shortcomings

There have been several other problems in the implementation and administration of the ZIMFEP schools. These problems range from shortages of materials and personnel to resistance to the ideas of the project to ambiguous government support. Although ZIMFEP schools have enjoyed a special status, they suffer from the same shortages that plague the rest of the over-loaded school system. ZIMFEP teachers named shortages of materials and textbooks as the two main problems they faced. The pupils' negative attitude to EWP was the third biggest problem.[91] At the beginning of the program many of the teachers were cadres from the camps, and while they had the requisite ideological commitment, often they lacked the qualifications to be teachers. They were replaced by others who were more qualified, including expatriates, but their political orientation was not as pronounced.[92] No in-service was given to teachers to increase their understanding of EWP. Little by little, the EWP vision was being blurred, and ZIMFEP schools began to look more like other secondary schools.

Internal and external resistance

Another area of resistance to the concepts of EWP resulted from a historical precedent. Under the white regime in the 1970s there was a class of racially segregated vocational schools called the F2 schools. Because they involved farm and other production activities under the guise of education, they were highly resented. The Zimbabwean government felt compelled to emphasize that ZIMFEP was not "the resuscitation of F2 schools under another guise."[93] However the association of subjugation to manual work and colonialism has remained strong.

Resistance to the EWP ideas has also been seen in the Ministry of Education itself. ZIMFEP has been viewed by some as a lowering of standards, and by others as a worthy experiment that cannot become viable.[94] The plain fact that it has not been expanded, nor have any new socialist curricula been produced by it, attest to the ambiguity of the Ministry towards it. The process underway to localize the foreign controlled Cambridge examination system has pointedly not taken into account any aspects of EWP.[95]

It is safe to conclude that few of the goals of EWP have been realized even in a modest way, especially those concerned with developing a socialist curriculum. At the same time it should be said that such complex social and political goals are very long term, and awareness will be slow. As one observer noted: "Perhaps ZIMFEP's most important success is the high public profile it has given the ideas of EWP. Official pronouncements about education in Zimbabwe never fail to mention the centrality of EWP to current efforts at change."[96] ZIMFEP itself remains organizationally intact although it has come to depend somewhat on foreign donors[97] and expatriate personnel.

2.4 ZINTEC, THE ZIMBABWE INTEGRATED TEACHER EDUCATION COURSE

The massive expansion of the education system of Zimbabwe after 1980 necessitated an expansion and restructuring of the national teacher training programs. Not only were the school enrolments dramatically increased (by 487% by 1990)[98] but the structure of teacher training was altered to include about 50% of the program devoted to on the job learning. Established teacher training institutions were greatly

affected by this innovation and the role of distance education has been greatly developed. The expansion continues up until the present, but there are still shortfalls in the supply of qualified teachers, and serious questions of educational quality have been raised. The general goal at Independence of providing a good education to all, with attendant benefits, is in fact far from being realized.

Origins of ZINTEC

The roots of this reform lie in the rapid expansion of the education system just after independence. Under the white regime access to schooling beyond the primary level for Africans was very limited. It was therefore a central goal for the new government to attempt to implement universal education. Consequently large numbers of new teachers would be needed.

A lot has been achieved in improving access to education. By the end of 1981 the total school enrolment had risen from 850,000 to nearly 2 million. [99] Secondary school enrolments have increased by an average of 28% per year since 1980, going from 66,215 in 1979 to 708,080 in 1990.[100] There has been a major school building program at all levels, and transition rates from primary to secondary have risen dramatically.[101] In terms of academic achievement there has also been a large increase. For example, in 1988 22,786 students passed five or more O levels.[102] This represented about 12% of the total candidates, which was proportionally down from the early years, but in absolute terms equalled more than a five-fold increase since independence.

The socialist orientation of the Government also had an important influence on the ZINTEC innovation. The essence of ZINTEC was that it combined theory with a large component of practical learning. (See the discussion of EWP above for further discussion of Zimbabwean interest in combining learning and work.) Two of the four years of the course were to be spent in practice teaching which raised the possibility of co-operative learning with veteran teachers, as well as permitting a long-term involvement in a school community. This kind of short term training, followed by direct learning in the field, was an innovation seen in the camp of the nationalist movements during the liberation

struggle. These camps in Moçambique and Zambia were run along strongly ideological lines.

Socialism also demands a re-structuring of society to address historical inequities. This gave further impetus to a new teacher training scheme. In the established teacher training system, inherited from the old regime, there were 3000 generally well-qualified white teachers and 20,000 African teachers of varying qualifications with different pay scales based on race.[103] Those who designed ZINTEC were well aware of the government's heavy political obligations to address this unfairness.

Another historical factor was the involvement of foreign donors and NGOs. Many countries in the West were eager to help Zimbabwe establish itself as a foil to South Africa which had had strong links to Rhodesia. The political symbolism of having an African government succeeding from a white supremacist government right next door to South Africa also added to the legitimacy of foreign aid. Since Zimbabwe had achieved independence relatively recently, there were fairly obvious places for foreign aid programs to be targeted. These programs had the advantage of avoiding the mistakes of the first wave of foreign aid associated with the independence movements of the 1960s such over-dependency on Western expertise. The Zimbabwean government, faced with massive new costs, was generally receptive. Thus UNESCO was involved in the early planning stages of ZINTEC, and support was offered from USAID and the British Council.[104] Organizations such as WUSC in Canada were keen to provide staff for colleges, and teachers for secondary schools.

Goals of ZINTEC

The over-riding goal of ZINTEC was to provide badly needed teachers in the rapidly expanding school system. ZINTEC offered several advantages in this effort, primarily that 50% of the student-teachers would be in the schools at any one time. They were to be well-supervised and so in theory would be able to relieve some of the demand for education right away. Also, the ZINTEC model was estimated to be relatively cheaper, even given the fact the students would be paid

modest salaries throughout their studies.[105] The old three-year system could be replaced by the four-year ZINTEC system without building any new college facilities.[106] Distance education was to be the foundation of this innovation. It allowed real-life practical experience, and avoided training unmotivated teachers on the principle that those who did not take to it readily would seek other careers.[107]

One of the greatest needs was at the primary level, and here again ZINTEC had the goal of providing *appropriately* qualified teachers. The reality of teacher qualifications was that a large proportion of teachers, for example, 15,000 of 54,000 in 1983,[108] were unqualified. Therefore ZINTEC sought to quickly provide large numbers of moderately trained teachers who might benefit from the expertise of their veteran colleagues. Pupil-teacher ratios were rising quickly and class sizes of 50 were not uncommon.

Many of the objectives for the ZINTEC program were similar to those found in other teacher training systems such as the ability to plan and evaluate lessons, to think objectively, and to relate classroom experiences to life in wider society. But many of the objectives were also explicitly political. For example:

> To transform the education system from a capitalist to a socialist point of view;
>
> To create an education system that will meet the development needs of the Zimbabwean society through integrating theory and productive activities.
>
> [To have the] ability to promote a socialist world-view and respect for productive work.[109]

These objectives fell in line with other public pronouncements on the socialist nature of Zimbabwean education such as ZIMFEP and the Political Economy of Zimbabwe, or PEZ, curriculum.

Implementation of ZINTEC

The first program in January 1981 was essentially a three year on the job training scheme, although by the mid-1980s a four-year hybrid program had developed. (The first and third years were spent at the college and the second and third involved practice teaching experience.) The intakes occurred three times a year so as to create a 'rolling' production of teachers who would graduate on a termly basis, three times a year. By 1983 there were already 54,000 primary teachers, up from 35,000 in 1981.[110] By 1984 there were over 8700 students in the ZINTEC program.[111] In 1990 there were 16,576 teachers in training, a 487% increase.[112] In 1993 there are now 15 teachers' colleges taking in 2000 new students.[113] Two teachers' colleges have now been assigned the role of training unqualified and under-qualified primary teachers.[114]

The Ministry created a new subsection Directorate ultimately answerable to the Permanent Secretary of Education. Beneath this was a new ZINTEC National Centre to administer the distance education materials, course development, co-ordination with the existing teacher colleges, and supervision of placements, and other aspects of the program.[115] The program made use of existing institutions such as the University and the old teacher training colleges where most of the teacher training expertise was located. In 1986 the ZINTEC National Centre was transformed into the National Distance Education Centre. Its objectives included the homogenization of teacher education curricula and methodologies, expansion of teacher education enrolments, and centralization of the production of materials.[116] These changes were a result of an interim evaluation of ZINTEC in 1986. Another one of its recommendations was that the old three year B.Ed. program be discontinued because it had a relatively small practical component. This was immediately implemented. This program later re-surfaced as a hybrid program with two years theory and a one year practicum.[117]

A challenging bureaucratic problem arose concerning the role and independence of the various teachers' colleges and their relationship to the Associate College Centre at the University of Zimbabwe. The ACC had the role of making teacher education uniform, but this was interpreted by some established trainers as suppressing individual initiative and

constraining professional judgement. Making the situation more complicated still was the competition for status and knowledge control between the University and the colleges. ZINTEC has been perceived by some to be a lowering of standards and so a conservative backlash continues as teacher educators wish to be free from directives from above.[118]

Resistance, Shortages, and Minimal Qualifications

ZINTEC experienced several of the problems to be expected with such a large innovation, especially in times of such dramatic political and social change. At first the implementation of distance education was met with scepticism, condescension and resistance from the established teacher colleges and veteran teachers.[119] As well, there were several practical problems such as the shortage of teacher supervisors. The ratio of students to supervisors increased from 8 to 1 in 1980 to 35 to 1 in 1984[120] and afterwards the *de facto* ratios were 50 to 1 and worse. Many expatriates were employed.[121] In addition, there were shortages of funds for the travelling expenses of supervisors. Many students were left to be supervised by headmasters barely more qualified than themselves. The many new rural day schools had shortages of important items such as textbooks so the students had trouble putting into practice their teaching theory.[122] Money originally earmarked for more tutors and the under-equipped library facilities was ultimately directed into building new schools.[123] A new dependence on foreign donors had begun to emerge.[124]

The shortage of qualified teachers continues due to large school enrolments. Of the 80,000 teachers working in 1989, 75% had less than 5 "O" level passes.[125] The demand for education has been so great and the government so assiduous in its provision that the proportion of untrained teachers has remained essentially unchanged. In some areas up to 70% of teachers are untrained.[126] At the same time the attractiveness of teaching as a profession is actually declining. One option the government has pursued, although it drains scarce foreign currency reserves in a period of economic constraint, is to send teachers overseas for training. For example, in a gesture of its commitment to socialism, in 1986 Zimbabwe sent 1200 teachers to Cuba for training.[127]

Fiscal constraints

At first the ZINTEC program was quite popular.[128] Yet by the early 1990s articles had begun to appear on why students do not choose teaching. Economic constraint has forced the Ministry to flatten salary costs wherever possible. Zinyama found that poor salaries and the tedium of teaching were the main reasons university students in Geography were not interested in it. Chivore (1988) came to similar conclusions about the unattractiveness of the teaching profession as a whole. Many of the complaints centred around poor working conditions and salaries. Nyagura and Reece found that teacher quality had generally declined by 1992 and they called for more in-service and clinical supervision, as well as better curriculum implementation guidelines.[129]

The Zimbabwe government, like many others, has begun to feel the effects of economic recession and budgets are being cut. The recurrent budget for teacher education is on the decline (20% in 1988 to 17.7% in 1989)[130] despite serious material and staff constraints already being felt. On the other hand, a larger question presents itself, that of over-expansion of the school system of which ZINTEC is an integral part. The economic expansion that was expected to accompany school expansion is not present. For example, in 1990 job opportunities in all sectors rose about 13.9% while the number of potential employees rose 21.4%.[131] School leavers continue to outnumber jobs in the 1990s, which ironically increases the economic attraction of the teaching profession at the same time as the profession itself becomes demoralized and less meaningful.

It is therefore safe to conclude that although the primary goal of providing large numbers of teachers has been met neither the socialist nor the universal education objectives of ZINTEC are likely to be achieved in the near future. The proportion of qualified teachers has not improved. Ineffective teacher training, poor teaching conditions, and poor salaries have greatly lessened the attractiveness of teaching as a career.

2.5 Table I Case Study History Summary Table

Name of Reform	SUMMARY OF CASE STUDY HISTORIES Aim	Basic Objectives	Implementation Strategies	Results
SMEA	To implement a new progressive math program (Scope: initially small but eventually national.)	To use "guided discovery" and other progressive math teaching methods. To have the latest math program for the new Kenya. To make math less tedious. To expand educational opportunity.	Remake the SMP program into a Kenyan equivalent with Kenyan texts+guides Use teacher networks and foreign-supported inservice training. Mass dissemination and mandated use.	Poor implementation due to weak teacher support and in-service. Mandated use met resistance and difficulties in conformity. Urban schools did well but others regions not. Sudden abolition.
8-4-4	To make the school curriculum more practical and well matched to training needs (Scope:national)	To make education more relevant and useful To provide practical education leading to self-employment. To expand technical training. To instil work values	Mandated implementation. Liaison groups to steer changes. Massive expansion of facilities, primarily through local efforts. New post-secondary institutions.	Poor planning and crisis management. Weak program support but increased demands on school system. Revision of program to resemble earlier syllabus.
ZIMFEP	To integrate education and production (Scope: initially small but planned to be national; marginalized)	To design new EWP pedagogies to use to overhaul the school system. To develop links between schools and communities. To encourage Zimbabwean socialism	Established eight schools with overseeing body. High level Ministry support. Forge links with co-operative movement and seek foreign support.	Stagnated expansion at original levels. No curriculum development for system. Fading gov't. support. Unresolved contradictions academics vs. production activities.
ZINTEC	To economically train many new teachers to meet new demand (Scope: national)	To use on the job and distance education to get teachers into field. To promote socialist education. To centralize teacher training. To expand opportunity for education to all	Redesign training around extended field placements run by a national directorate. To redeploy existing facilities and expertise. To expand distance education model.	Many new teachers but demand still not met. Proportion of qualified teachers still low. Poor support for program. Basic standards often not reached. Socialist education not addressed at all.

2.6 OVERALL CONCLUSIONS FOR THE CASE STUDIES

Except for the ZINTEC case, these histories show that most of the goals for each educational reform program reviewed here have not been met. Even with ZINTEC the actual running of the program as it was envisioned in a close supervision and distance education model is not occurring on a widespread basis. Another feature that marks all four cases is a lack of resources and budgets to carry out the objectives. In all four the government was in some measure dependent on foreign aid--either personnel or financial support. Two of the programs, 8-4-4 and ZINTEC, envisioned large structural changes ,and these were quite quickly mandated for implementation with little consultation. Also both of these programs went through a variety of configurations before reaching their present form. SMEA and ZIMFEP shared fairly far-reaching curricular goals involving the transformation of society in some fashion, but history has shown this to be unrealistic.

2.7 Notes for Chapter Two

[1] Lillis (1985b p.88) mentions four schools, Sherborne, Winchester, Marlborough, and Charterhouse, which became early implementors of SMEA and were staffed largely by expatriates serving a new African elite.
[2] King. p. 81
[3] Flemming p. 25-27
[4] Flemming p. 29-30
[5] As cited by Lillis 1985a p. 144
[6] Lillis 1985a
[7] Lillis 1985a p. 152
[8] Lillis 1985a p.146
[9] Lillis 1985a p. 149
[10] Lillis 1985a p. 153
[11] Lillis 1985a p. 150
[12] Lillis 1985b p. 94 Lillis, 1985a, adds the comments of an Inspector for Mathematics who contends that the character of SMEA was essentilly an attempt to democratize an elite model of education. It was therefore culturally inappropriate because it confused educational exercises such as Euclidian geometry with math skills necessary for workplace applications. What was needed was a philosophical re-socialization of Kenyan society.
[13] Flemming p. 30
[14] For example, see Eshiwani p. 349 Lillis notes Eshiwani's criticisms in 1970, '71, '74,'78, & '79.
[15] Lillis 1985a p. 153
[16] p. 83
[17] Personal communication with Andrew Chirchir May 1993
[18] Two political parties, Ford-Kenya and Ford-Asili, favored a re-introduction of A levels. The ruling party, was re-elected and has firmly held to the 8-4-4 system. Daily Nation January 9, 1993, p. 14
[19] Eisemon p. 28
[20] Sifuna (1989) compared two districts, Nyeri and Bugoma, which had very different exam results (in 1984). He concluded that the number of qualified teachers, teaching facilities, school leadership and community relationships were all significant factors in this regional disparity. Interestingly the 1992 results for these two schools show a widening of the gap with Nyeri at #2 an Bungoma at #39. Daily Nation 26 Dec. 1992
[21] See Irazarry's informative discussion of this point.
[22] Bowser p. 12
[23] Bowser p. 13
[24] Mbiti p. 34
[25] Harber p. 39
[26] Olembo p. 374
[27] Included on this committee were members of the Kenya National Teachers Union or KNUT which had a hand in drafting the initial 8-4-4 syllabi as well as giving input through the KIE during the implementation stage. Weekly Review April 27, 1990 p. 13
[28] It should be noted at the outset that 8-4-4 was a major re-structuring of all levels of the education system, and that an exhaustive list of the objectives at all levels would not be profitable here.
[29] Republic of Kenya, Ministry of Education, Science and Technology (1984) 8-4-4 System of Education, p.1 as cited in Sifuna (1992)
[30] Sifuna (1992) p.143
[31] Mbiti p. 34 . It was envisaged by the National council for Science and Technology that the ratios would be 1 professional to 10 technicians to 30 craftsmen/artisans by 2000
[32] Mbiti p. 37
[33] Mbiti p. 36
[34] Eisemon p. 30

[35] Eisemon p. 30
[36] The Weekly Review 27 April 1990
[37] Daily Nation 26 Dec. 1992
[38] Sifuna p. 143
[39] The Standard 13 Feb. 1993 p. 14
[40] Daily Nation 6 Feb. 1993 p. 15
[41] Weekly Review 27 April 1990 p. 5
[42] Weekly Review 18 May 1990 p.18
[43] Daily Nation 9 Jan. 1993
[44] Daily Nation 26 Dec. 1992
[45] Weekly Review 22 Feb. 1991 p. 5
[46] Daily Nation 24 April 1993 p. 14
[47] Daily Nation 27 Jan. 1993
[48] Weekly Review 5 Mar. 1993 p. 32
[49] Daily Nation 20 Feb. 1993 p. 14
[50] Daily Nation 23 Feb. 1993 p. 3
[51] Foster 1989 p.115
[52] The Weekly Review 23 August 1991
[53] Dialy Nation 24 April 1993 p. 14-15
[54] Daily Nation 25 July 1992 p. 15
[55] From ten subjects to eight.
[56] Daily Nation 1 May 1993 p. 10
[57] Daily Nation 13 Feb. 1993
[58] Harber summarizes it well saying " overt and conscious political education, while it has not appeared on the curriculum as such, has taken place via history and civics but in 'safe' quietist and passive manner aimed at political comformity rather than critical inquiry." p. 41
[59] Daily Nation 6 Feb. 1993
[60] Daily Nation 1 May 1993 p. 11
[61] Lauglo & Narman pp. 240-241
[62] For a good summary of these criticisms see Daily Nation January 9 + 27 1993
[63] For example, Mwira found that the relative inferiorty of the Harambee exam results stemming from lack of resources such as qualified teachers, texts, and equipment, has actually worsened. Harambee education will become more expensive to individuals and governments, and therefore less accessible.
[64] Aother interesting and related case is that of the introduction and fasy withdrawal of a syllabus called the Political Economy of Zimbabwe, or PEZ. It was to be an academic study of scientific socialism from the Zimbabwean point of view but immediately opponents attacked as political propaganda.It was introduced in 1987 amid great debate and withdrawn in 1989. See Jansen 1991
[65] For example, by 1985 only 35,000 of 162,000 families needing resettlment had gotten it and in 1987 4000 white farmers still controlled 50% of all arable land in Zimbabwe. Dzimbo 1991 p. 286
[66] A good summary of this can be found in Gustaffson 1988 p. 222
[67] Chivore 1991 p.205
[68] Chivore 1990 p. 203-4
[69] Conference on Education, Harare 27 August 1981 as cited by Jansen 1990 p.32
[70] van Rensburg p. 89
[71] van Rensburg p. 90-1
[72] Chivore 1991 p. 204
[73] Gustaffson 1988 p. 220
[74] Gatawa p. 14
[75] Jansen 1991 p. 79
[76] Chivore 1990 p. 205
[77] This is one of the aims of the Shandisayi Pfungwa EWP school in Zimbabwe. van Rensburg p. 115
[78] As quote by Gustafsson 1988 p. 225
[79] Chivore 1991 p. 205

[80] Jansen 1990 p. 33
[81] Gustafsson 1988 p. 225
[82] Gustafsson 1988 p. 226
[83] Jansen 1990 p. 34
[84] Dzimbo 1991 p. 297
[85] Gustafsson 1988 p. 224
[86] Dzimbo 1991 p. 301
[87] As quoted by Gustafsson 1988 p. 226
[88] Gustafsson 1988 p. 225
[89] Jansen 1990 p. 33
[90] 1991 p. 214, p. 217
[91] Chivore 1991 p. 208
[92] Chivore 1991 p. 215
[93] Gustafsson 1988 p. 224
[94] Jansen 1990 p. 33
[95] Chivore 1991 p. 216
[96] M. Lewis as cited by Jansen 1990 p. 34
[97] Dorsey et al 1991 p. 176. ZIMFEP recieved $190,000 US from DDC-AUS.
[98] Dorsey et al 1991 p. 52
[99] Gatawa p. 13
[100] Dorsey et al 1991 p. 18-19
[101] See Mackenzie p. 342. In fact progreesion **O** to **A** level from is actually down from 20% in 1980 to 7% in 1985, but considering that the intake is many times larger and far less elite, this is still a great achievement
[102] Dorsey et al 1991 p. 27
[103] Chung p. 34
[104] Dzimbo 1989 p. 21-22
[105] Chivore (1986 p. 30) cites two studies to this effect: Ncube 1883; Chanakira 1984.
[106] Chivore 1986 p. 29
[107] Chung p. 32
[108] Gatawa p. 13
[109] Gatawa p. 14
[110] Gatawa p. 13
[111] Gatawa p. 20
[112] Dorsey et al 1991 p. 52
[113] Dorsey et al 1991 p. 56 Chinoyi Teachers' College will open in 1993.
[114] Dorsey et al p. 61
[115] Gatawa p. 15
[116] Dorsey et al 1991 p. 93
[117] Dorsey et al 1991 p.93
[118] Dzimbo (1989) has an informative discussion of this on p. 25.
[119] Dzimbo 1989 p. 21
[120] Chivore (1986) p. 43
[121] Dzimbo 1989 p. 22
[122] Chivore 1986 p. 45-47
[123] Dzimbo 1989 p. 22
[124] For example UNESCO gave $14,000 (US) to the Curriculum unit and VUA gave $1.2 million for teacher training. Dorsey et al p. 175-6 citing 1989 UNDP report.
[125] Chung p. 35
[126] Dorsey et al 1991 p. 92
[127] Mackenzie p. 349
[128] Gatawa p. 21

[129] p. 236
[130] Dorsey et al 1991 p. 168
[131] Mackenzie p. 346

Chapter Three
Literature Review

3.0 INTRODUCTION: CONCEPTUAL FRAMEWORK OF THE THESIS

The four reforms which will be examined have been documented in various articles with many critical analyses attempting to explain the outcomes. These explanations range from an examination of intervening variables and political factors to economic limitations and administrative decisions. In general, they are informative and provide useful specific details, but not within the framework of a conceptual overview.[1] Present and future policy-makers, both national and international, can benefit from them.

However, since a debate exists between two different conceptual viewpoints on reform, it is useful to consider the Kenyan and Zimbabwean reforms from competing perspectives. This debate is between the world systems and the management perspectives. The former is concerned with political and economic relationships in the broadest sense in an attempt to find patterns and predict change. The latter is concerned with the dynamics of specific organizations and programs, and their patterns of change. In other words, one takes a universalist perspective that sees the same pattern in many different places, while the other sees patterns as primarily the result of local conditions and decisions. Several key differences emerge between these two perspectives. These include the differentiation of key actors and institutions, areas of conflict, cultural considerations, and economic factors.

Each perspective includes a wide number of viewpoints and scholarly orientations, many of which can be applied to the economic, social, and political realities of Zimbabwe and Kenya. However, for the purposes of this study there must be a judicious narrowing of focus. In management perspective the literature of implementation theory alone is vast. The selection of key components of the literature should also reflect the special nature of developing countries. While in the West there are economic constraints and a strained consensus about the aims of schooling, these problems are multiplied many times in the developing world. For example, movements to decentralize decision-making and budget funding in the developed world have generally been dealt with in a formal, consultative manner. Such movements in the developing world entail mostly government mandates and strong political action by

established elites. The implementation literature on incentives to decentralize would therefore have to be adapted to recognise this less democratic reality. The management perspective, while recognising that reform efforts face a complex challenge, will be narrowed to three general considerations: a) implementation strategies for decision-making, indigenization and decentralization; b) internal political and organizational resistance; and c) external factors and contingency analysis.

The world systems perspective also requires narrowing for the purposes of this study. Within the world systems perspective heavy emphasis is sometimes laid on the economic aspects. Its economic model rests upon a conflict approach which contains neo-Marxist elements. For example, it categorizes states into "core" and "periphery" and contends that core states exploit labour in peripheral states through multinational corporations and other channels.[2] The transnational bourgeoisie uses its power, often with military backing, to subordinate certain classes. This has the ring of determinism; but it is not always true that patterns in the global economy directly determine educational structures. For example, many influential NGOs have sponsored educational and economic programs that ultimately result in challenges to local economic elites. Ginsburg et al. explain this political situation well:

> because of the contradictions within and between the economy, education, and state, and because of the contradictory dynamics of race and gender relations on which elites and other groups also try to navigate, this shaping will not always lead in the same direction nor even operate in the short run in all respects in the interest of economic and state elites.[3]

With these points in mind then, this study will emphasize more the political and cultural factors noted in the literature on world systems rather than try to show deterministic economic relationships.

3.10 THE MANAGEMENT PERSPECTIVE

Those theorists who examine the process of educational change from a management point of view see successful reform as the result of a carefully organized action taking place over a given time. Conversely, they see failures in reform as the result of actors in the change process not taking into account those variables, organizational structures and procedures which are vital to it. Therefore their interest lies in developing models of reform and researching intervening variables to avoid future pitfalls. The general volatility of the political climate in the developing world forces those who would implement change to consider carefully what the reaction of certain groups will be, and how they might deal with this.

The rapid expansion of education in Africa, starting in the 1960s, used a relatively straight-forward model for educational administration. Building on the human capital approach, management generally meant expansion of facilities, the teacher supply, and student enrolment. There was less need to rationalize than to replicate. Theoretically, the rapid social and economic progress away from colonialism would lead somehow to a national version of education for each country. In fact, educational administration was conducted largely in the same way as that of the colonial era, with centralized control and a hierarchy centred in the metropolis with all of its urban values and languages. This trend dovetailed well with the popularity of scientific approaches at the time, such as the curriculum model of "Research, Development, and Diffusion". The key idea was to leave curriculum development to centrally placed experts who would eventually and scientifically find the best system.[4]

The economic contraction of the succeeding decades, and the general failure of education in Africa to live up to expectations in such areas as educational quality, skill provision, and efficient use of resources, has led to calls for better management.[5] Reform efforts, when seen under the management perspective, are concerned with addressing these problems in a multifaceted way which recognises their complexity. Alternative approaches to organizational design, administration and management are needed.[6]

3.11 Indigenization and Decentralization of Decision-making

Many researchers have touched upon the importance of local involvement in the achievement of the goals of a new system or curriculum. Michael Crossley, in his discussion of a school extension project in Papua New Guinea, makes this point quite clearly. Because there is often teacher resistance to new ideas and routines, attempts should be made to innovate at the school level rather than mandate downwards from the ministerial level. "Improved curriculum implementation clearly demands the support and understanding of the teaching force and there is some evidence to substantiate claims that involvement in the curriculum development process can reduce the general resistance of the teacher towards change."[7] He does, however, acknowledge that other factors should be considered in change strategies such as budgetary supports and conflicts created elsewhere by local participation.[8]

Crossley, writing in the early '80s, is to some extent representative of a view which started in that period. It posited that a major source of problematic or inappropriate curricula was the failure to indigenize or "Africanize" it. Rooted in a neo-colonial organizational structure that is essentially hierarchical, the ruling elite clings to a traditional view of education. Essentially it concludes that the system which selected it out from the general populace should be continued. Therefore educational reformers use indigenization, via regional decision-making, in order to adapt policies to local cultural and organizational realities. Localizing the decision-making for curricular change is seen as important in this view. A problem, however, is that upper level decision-makers may fear the political consequences of local decision-making. Attempts to address regional disparities, especially as reflected in exam results, often founder on this very point. Rather than give over resources and discretionary powers to low-achieving regions, the response is almost invariably one of greater standardization to the "national level" which usually is defined in a very metropolitan manner.

The level of receptiveness to educational innovation, especially that which has evolved from educational research elsewhere, is an

important consideration. Given the fact that many academics in developing countries receive their qualifications overseas, and yet are the most likely leaders for reform initiatives, there exists great potential for their initiatives to be misunderstood. As Kenneth King suggests: "The indigenisation process...requires that the technology be 'unpackaged', modified and adapted to suit local conditions and needs...There also needs to be a group in the wider population trained to understand and appreciate the findings for research studies."[9] Implementors of change need to cultivate new political and cultural networks and audiences, and new roles for research and criticism have to be developed *within* the existing political context. Only then will management practices become more effective. As Chinapah says, "greater participation in educational administration can contribute to more democratic decision-making processes [and better] opportunities for the underprivileged and marginal groups to voice their educational needs, priorities, and expectations can be provided..."[10]

Lillis addresses this issue of local input in curriculum development and raises the general question of the cultural relevance.[11] He suggests that the Euro-centricity of many curricula is what make them difficult to reform. The problem is multi-faceted. First, there often is inadequate indigenous expertise to develop the new curricula because of the tendency to ignore regional ideas. Further, there may not exist a political capability to see it through the necessary hurdles of an over-centralized system. At a theoretical level "the problem still remains in developing countries as to the appropriate pathways from the 'traditional' cultural assumptions/understandings/skills to those of the 'modern' sector."[12]

Lillis elsewhere touches on the difficulty of Africanizing the curriculum[13], and documents the resistance that reformers encounter. His argument is that grassroots proposals for change have often "confronted the value, power, and ideological positions of the 'politico-administrative elite'"[14] He uses the term "curriculum dependency" to indicate that the curriculum becomes dependent on central or metropolitan values, personnel and power structures. It should be noted that Lillis is not here putting forward a version of dependency theory or supporting the world systems view. He is simply noting that

curriculum reformers must take into account the strong resistance of certain political groups. Better management then, comes not from breaking free of Euro-centric pressures but rather learning to consult with those who must actually use the innovations.

3.12 Managing Internal Political and Organizational Resistance

Cohen et al. address these questions of political resistance from the point of view of foreign aid programs. Foreign donors must take into account the political and bureaucratic reality that their national counterparts must deal with. The significance of this for the management perspective is two-fold. First, it points to the need for research into the realities that confront any innovation whatever its origin. Second, it suggests that in many cases new partnerships and relationships with foreign donors need to be formed if innovations are to be successful. The established administrative order may be in need of evolution through the creating new networks for information dissemination and decision-making. Cohen et al. give a useful illustration from a successful World Bank program with the Kenyan Ministry of Agriculture. The consultants worked closely with Kenyan counterparts who alerted them to the budgetary and systemic realities, and the potential disruption of Ministry operations.[15] As Chinapah points out, it is the "front-line implementors at the different levels of educational institutions...[who] play a decisive role in the actual realization of educational policies, programs and projects..."[16]

Bray also touches on this point with his discussion of decentralization. He suggests that the historical tradition of bureaucracies to be control-oriented hampers the development of new models of decision-making.[17] Rondinelli reaches a similar conclusion that administrators are more effective when they are consultative facilitators rather than controllers.[18] Jansen sees failure to consider critical political contingencies as a major cause of curriculum failure.[19]

Chinapah strongly advocates organizational de-centralization at least to the regional level or lower. He mentions several advantages,

including better linkages between policy-makers and implementors, increased communication between all actors, improved planning at the subnational level, more valid evaluation of programs, and greater efficiency.[20]

3.13 External Factors and Contingency Analysis

The multitude of external factors that affect reform is a theme addressed by many writers. Spaulding reviews a variety of reform efforts that have considered admission polices, taxation schemes, labour planning, appropriate technology, and government-university liaison just to name a few.[21] Just how to juggle these disparate factors often eludes reformers. Merryfield found that there is often a great difference between ministry goals, national syllabi, and classroom instruction.[22] External pressures on the school system do not often result in real change but can delay and confuse reform efforts. Governments may respond to public demand superficially but this uses valuable organizational resources, and can increase cynicism among teachers and others.

The current fiscal crisis, felt world-wide, adds complexity to the puzzle of contextual factors. Heyneman lays out four basic adjustment options open to reformers: increasing resources, improving efficiency of current resources, cost efficiencies and retrenchment.[23] All of these options come with political prices and complex sets of actors whose preferences must be considered. Unfortunately, reformers are often left with few options. The uncertainty and inertia of the political and bureaucratic climate in developing countries, along with regional disparities and social stratification, ethnic divisions, and severe economic constraint, all combine to necessitate a special approach to the management of reform.

In a wide-ranging theoretical treatise on this problem, Rondinelli et al. have developed the "contingency" approach. It is highly representative of the management perspective and is therefore given a special prominence in this study. Their essential argument is that while no set or 'standard' operating procedures exist to cover every eventuality for organizational change, it is possible to use a set of guidelines based on the level of environmental uncertainty and degree

of innovation to improve implementation. (See Tables I and II.) They list several common problems of implementation that need to be addressed, and which can be done through contingency analysis. These include overly complex reform proposals, the unpredictability of some reforms, the untransferability of Western educational reforms, failure to address school level changes, and failure to assess organizational capacity to manage change.[24]

With contingency analysis it is taken as given that there are several variables, such as the level of existing knowledge and socio-economic factors, which cannot be generalized from country to country, and that trial and error are a legitimate form of management improvement.

> Contingency theory recognizes that innovative projects require a more adaptive management strategy than do routine construction or service delivery projects. A contingency approach attempts to join learning with action to move incrementally toward effective and efficient implementation, based on knowledge and experience gained through interaction with participants and beneficiaries.[25]

Rondinelli et al. provide a variety of organizational alternatives which can be considered after the initial assessment of environmental uncertainty and degree of innovation. These choices involve matching management strategies (generally either mechanistic or adaptive) to organizational requirements.[26] In addition they spell out the circumstances under which certain strategies have to be co-ordinated. They consider such points as the need for incentives, the degree to which budgets should be negotiated, and the various forms of co-ordination.[27] An overview of the central variables in contingency analysis is given below.

Table II Factors in Environmental Assessment [28]

	Complexity	Stability
Socioeconomic environment Political-administrative systems	–Number of power groups or stakeholders –Degree of political and ideological differences	–Nature and pace of political change –Impact of political change on administration –Degree of political support for project
Economic systems	–Degree of economic diversification –Extent of free market –Degree of technological diversity –Distribution of income and wealth	–Pace of technological change –Degree economy open to international influence –Pace of change in economic structure
Organizational environment	–Number of beneficiary groups –Economic and social diversity of beneficiary groups –Number and diversity of organizations involved in project –Number and diversity of funding sources –Number and diversity of organizations providing support –Number of administrative levels to which project implementing agency is responsible	–Pace of change in beneficiary relationships with government –Frequency and degree of change in leadership of implementing agencies –Probability of stable funding

Table III Criteria for Judging Components of Innovation [29]

Dimension	Degree of Innovation Low	High
Task variety	–Functionally similar –Long time required for completion	–Functionally diverse –Short time required for completion
Task analyzability	–Precise objectives –Linear sequence –Control by rules –High division of labor; specialized jobs –Much guidance from plans and models	–Imprecise objectives –Iterative sequence –Control by performance –Low division of labor; integrated roles –Little guidance from plans and models
Scale of innovation	–Few institutions –Limited geographical coverage –Few components or elements	–Many institutions –Wide geographical coverage –Many components or elements
Degree of deviation in innovation	–Mostly known tasks –Mostly current skills –Low professional skill requirements	–Mostly unknown tasks –Mostly new skills –High professional skill requirements

These two tables are quite representative of the management perspective because they present reform as a challenge for administrative science. Rondinelli's work is therefore given a central place in the management perspective. The key idea is that through careful technocratic analysis and planning it is possible to achieve the goals of a given reform. Ideally there should be a group of fairly high level decision-makers who can assess the various factors and components that will affect the outcome and make adjustments accordingly in the implementation process.

3.14 Summary of Key Components of the Management Perspective

1) Localizing the inputs for educational innovation greatly assists implementation. Curricula should be indigenized to increase their adaptation. The problem of dependency on metropolitan values must be considered.

2) Decentralization of organizational structures and decision-making reduces resistance to reform and increases efficiency.

3) Recognition of the political and bureaucratic realities that front-line implementors face should guide implementation strategies. There should be an emphasis on consultation rather than mandates or direct commands.

4) External political and economic pressures can confuse, divert, and defeat efforts to reform. Recognition of the costs and alternatives should be considered. A contingency approach which considers external factors such as the level of environmental uncertainty and internal factors such as the degree of innovation, can foster the successful management of reform.

3.2 THE WORLD SYSTEMS PERSPECTIVE

World systems theory, sometimes called world institution theory, examines the patterns of institutional transfer across borders and cultures. It sees great commonality among the structures, practices, and effects that schooling has in many different nations. Adick lists some of these features as: a differentiated system of classes, levels and graduation requirements, a prearranged curriculum, systematic differentiation between teaching and learning, and state-controlled regulation of teaching practices.[30] There is much evidence that there a global convergence of schooling is occurring. "Education as a social institution is a transnational, or 'world culture' phenomenon, in precisely the same sense that science, technology, political theory, economic development, and a host of other phenomena are transnational in nature."[31]

World systems theory has particular application in the developing world, or in so-called "periphery" states, where the patterns of schooling tend to be very consistent among states. It is well documented that these states, particularly those in Africa, were economically and politically handicapped by colonialism. However, in many cases several

decades have gone by and political polarization, cultural elitism, and economic stagnation are still standard features of these states. Many, including those with little or no colonial history such as Liberia, have consistently chosen European style education and promoted their nation-building strategies upon it. The question arises, what is the benefit of this style of education? World systems theory attempts to explain this phenomenon of developing countries vainly seeking to attain a *modern* world culture through education. It also offers an explanation as to the limits of all efforts to reform education systems. Five key facets of the world systems perspective are discussed below.

3.21 Schooling and the Power of the Modernity Myth

The world systems view argues that states in the developing world are required by political necessity to use schools to signal the mythology of modernity. The institution of education becomes an unwitting instrument of legitimation for certain kinds of political and economic structures at the deepest level. Meyer says that schools go beyond the inculcation of skills and values; they actually intensify the socialization and allocation of positions in society. "These legitimating effects of schools reconstruct reality for everyone--the schooled and the nonschooled alike."[32] Because school systems are large and often secular organizations, and have been perceived historically to be central to the transformation of post-colonial societies, they can create an institutional mythology. This myth is one that essentially says it is possible to "catch up" to the West in modernity, in the enjoyment of technology and modern science, in the reduction of social ills, in the institutionalization of a just meritocracy. Mwiria observes in his analysis of Harambee schools in Kenya that these schools offer little rational chance of social mobility but they act as powerful agents of socialization in propounding the myth that economic opportunity is expanding. "[Education] is a highly marketable political good, and populist politics would favour selling it to a thirsty public."[33]

Over time schools begin to expend some of their organizational resources to the maintenance of this myth through various ceremonial,

ritual, social and even political activities. Easton's work on systems theory[34] should also be mentioned here. He suggests that the system of images created by school about the political functioning of society must be to some extent harmonized with the general political environment. Otherwise the system will undergo an adjustment related to the level of support individuals give to institutions.

Since these myth building activities can be to the detriment of the practical functioning of school, it must be to some extent "decoupled" or freed somewhat from public scrutiny.[35] The school cannot be directly seen as propagandistic, nor can it be seen as entirely outside government control if it is to act as an instrument which seems to broaden mass opportunity. Somehow the decoupling must be done by a deflection of attention into say, "nation-building", which is the job of everyone, not just the state. If this decoupling is done on an on-going basis, a paradoxical and perhaps unstable situation develops. There is great popular demand for schooling but little rational expectation of it effecting much social change despite that being one of the central tenets of the myth. This decoupling is one of the central predictions of world systems theory. It underlines the pendular, and dangerous swings of political support associated with expectations for education in the developing world.

3.22 Legitimation of the State by the Education System

The legitimacy of the state in developing countries is much more tenuous than in the developed world. Bruce Fuller, in Growing up Modern, describes these versions of Western states that seek to provide modernization and national development as "fragile states". By this he means that the state, suffering from a lack of legitimacy and resources, has a need to nurture dependencies with other institutions that operate in the same environment as it, such as churches, unions, farm groups, and economic elites. A key institution is the school. School systems are large, often secular, and predicated on the need for the populace to acquire an external body of knowledge. This Western knowledge appears to provide a politically neutral path to modernization. But the very act of trying to manage these interdependencies and diverse institutions brings

on uncertainty and contradiction.[36] Mass schooling often cannot be maintained due to economic constraints, yet it must be since the state looks to it for legitimacy. As well, "standardized" national systems often conflict with traditional social values and hierarchies. Fuller sums up the two conditions that affect the fragile state as "the level of institutional competition within the environment and the state's own capacity to manage interdependencies to reduce uncertainty."[37] It is into this context the mythology of Western institutions is seeded and grows. It promises certainty of knowledge and a clear path for individual development tacitly promised by the state. To question the state's legitimacy is to therefore question the validity of modern knowledge which has been so closely associated with economic opportunities.

Fuller goes on to detail how this happens on a day to day basis. It includes the use of Western corporate organization, reduction and homogenization of knowledge found in classrooms, teacher behaviour and the use of standardization wherever possible. He adds:

> Here the state and school are viewed as parallel, often independent hosts of Western cultural commitments. Both are deeply institutionalized within the world-wide network of Western polities, providing fundamental signals of what a "modern polity" should look like...[institutional] theorists emphasize the importance of shared and sacred commitments regarding how modern organization and modern socialization should appear to operate.[38]

3.23 International Influences on Education and the Fragile State

Arnove, in his study of the effects of the Ford Foundation on the transfer of knowledge, also acknowledges the vulnerability of third world institutions to the influence of the West. He argues that because the economic and political power behind such actors as the Ford Foundation and its associated educational institutions (like Stanford or Harvard Universities) is so relatively great, and because many Third World scholars are trained in Western paradigms through it, the Ford Foundation has developed ties of dependency that are hard to sever.[39] The developing country's tertiary education system is in the same fragile boat as the government, faced with declining resources,

competing interests from within and without, and laden with the same mythological freight. Foreign donors and foundations can be very persuasive. "The power of the Foundation is not that of dictating what will be studied. Its power consists in defining professional and intellectual parameters, in determining who will receive support to study what subjects in what settings."[40] The World Bank currently has a similar function because it is also a powerful organization in the area of education development.

Other writers, such as Irizarry, would add that the penetration of the developing countries' economies by modern foreign firms in many sectors,[41] and the inheritance of an export orientation to the economy, also tends to elevate the elusive goal of modern industrialization. Foreign technology and management ideas gain status. "Brain drain" and credentialism are natural outcomes of this interaction with the West's economic prowess. Ginsberg et al. enumerate the wide variety of actors in this "production and distribution of ideas in the world cultural system [including] multinational corporations, corporate foundations, international organizations, bilateral agencies and universities."[42]

Eisemon, in a study of higher education, foreign training and foreign assistance for university training, concludes that this can have a negative effect in terms of providing useful labour training. As well, it leads to damaging conflicts between the government and the university. These findings dovetail with a world systems perspective because they highlight the paradox of Western style education in a developing country. The myth of progress and reality of social stratification are at odds and this eventually results in a political crisis. A national higher education with its access to high level knowledge and modern culture is seen as a vital component of the myth of modern-ness. Those who participate in this high level culture attain high status:

> Higher education is central to modernisation ideology of Africa governments. The provision of higher education and the existence of a highly remunerated intelligentsia are evidence of opportunities for the social advancement created by the state. The well educated are ethnically heterogeneous, collectively privileged and as a result, are apt to identify their interests with the aspirations of the nation which

they see themselves as exemplifying. Their educational experience has imbued them with a rationalistic, technocratic outlook and acquisitive values...[43]

Thus, the expansion of education at higher levels re-inforces a transnational trend of convergence in schooling, and complicates the political terrain the fragile state must navigate. Highly educated groups tend to be politically influential and do not necessarily identify with the best interests of the state. Very often though, they are high level state employees. Furthermore, their international contacts provide a conduit for foreign notions of modern-ness to gain legitimacy.

3.24 The Fragile State and Local Culture

The world systems perspective does allow for some local variations in the patterns of schooling. The cultural context for educational reform naturally varies from country to country. The state must take into account particular historical factors and local cultural predispositions, and these can limit highly the state's scope of action. Berg-Schlosser points out that the state, which usually has little political choice but to address some social deficiencies, must be somewhat authoritarian for progress to be made. But then the state risks offending the established cultural groups which can in turn imperil social reform.[44] Berg-Schlosser's point is echoed by Cohen et al. who assert that economic rationality must always be balanced against "sensible concerns about political stability, legitimacy, and support-building and about the political importance and reward systems of bureaucratic structures."[45] Jansen comes to similar conclusions in his discussion of curriculum reform in Zimbabwe. Using Carnoy and Samoff's framework of state-in-transition, he concludes that curriculum reform is very difficult because of the limited options available to the government. He asserts that there are historical and social factors that condition the results of any attempt to make a radical change: "the policy options available in the fragile political environment of the transition are extremely limited."[46]

Lewin makes a similar point in his discussion of formulation of curriculum goals. He points out that it is not possible to develop new curricula without a consultation of many parties. Short term political motivations may doom an innovation, and also may not address the inability of the system to change. "Lack of response to innovations may be explained by the fairly rational reactions of those who, far from the centres of decision-making, fail to perceive any benefits accruing to them from changing well established and comfortable practices."[47] In other words, there exists a mix of political interests that is very difficult to accommodate. The fragile state is therefore left in an even more precarious situation. The demand for schooling remains high but as the state signals its continued willingness to respond to it, it must juggle a variety of cultural balls. "Effective demand [for school] is a key factor in determining reactions to change."[48]

A good illustration of this can be found in Carnoy and Samoff's notion of the transition state. It applies more to Zimbabwe than Kenya because Zimbabwe does aver a commitment to socialism. There, cultural groups with a socialist orientation abound from those in collectives to the bureaucracy to upper level politicians. Carnoy and Samoff suggest that the transition state uses the school system to incorporate the population into a "revolutionary transition concept of social relations" and to "give a new meaning to citizenship".[49] As well, the transition and the capitalist state both recognise the symbolic power of scarce education. For generations schooling has meant social mobility and "self-authenticity" and revolutionary movements cannot afford to ignore this fact. Therefore the Zimbabwean state must consider the constraining cultural fact of socialism in its policies. The world system view takes into account this authentication function of schools as they are influenced by local culture.

3.25 The Fragile State and Economic Limitations

Not only does the state need to address the cultural and political constraints associated with mass schooling, but also the economic limitations. Berg-Schlosser discusses the inherent tension in the political economy in his comparative analysis of Kenya, Tanzania and

Uganda. He points out that the links between economic growth and political stability are often problematic because we often find one without the other, although neither is a good predictor of the other. Third World states often resort to authoritarian government style and bureaucratic rather than democratic structures. However, this does not always result in further socio-economic development. States are therefore often forced to find a more flexible but fragile form. He says that, iforms of political stability must be found that are both sufficient to set economic and social reforms in motion and yet flexible enough to withstand self-induced changes within the political framework."[50] Carnoy and Samoff review the powerful economic limitations that affect the "cult of formal education" and call for policies that modify "the economic and social signals and incentives outside the educational system that largely determine the magnitude, structure and orientation" of the private demand for schooling.[51] Irizarry's discussion of "dependent industrialization" [52] gives further evidence of the heavy burdens of over-education and poor economic management that many developing countries experience. This economic dependency exacerbates the fragility of the state and limits the effectiveness of reforms.

Colclough's examination of the "higher education paradox" can be applied here. In simple terms, when there is a budgetary squeeze, the expansion of tertiary education to address skill shortages in the economy actually results in a worsening of the skill shortage. This is because funds are diverted from the primary and the secondary levels to pay for tertiary education. Consequently, the quality of students entering the higher levels declines, resulting in more failures and skewing student preference towards areas where the preparation has been better. These areas tend to be the humanities and not the science and technical subjects where the skill shortages are often acute.[53] Thus high demand for, and expansion of, education at the upper levels can actually work to deepen economic problems. Ironically this heightens interest in education as an economic salvation because the skill shortages still exist. Calls for education reform increase.

Ginsburg et al. point out that educational reform tends to occur during periods of economic crisis. This is when the contradictions in

economy-polity are not being successfully resolved by existing structures. Therefore conflicts arise which the state must address both economically and culturally through the vehicle of schooling.[54] Yet these same contradictions also minimize the potential impact of educational reform policies.

3.3 World Systems Theory and Dependency Theory

A note of clarification should be made concerning dependency theory which appears to contain many of the components of world systems theory. Dependency theory provides us with similar global explanations to that of world systems theory regarding the patterns of schooling in the developing world. However, world systems theorists see dependency theory as deterministic and too narrow to explain the wide variety of political experience that occurs. Dependency theory posits that the contradictions and inappropriateness of the educational systems in the developing world stem mainly from the imperialism of international finance. Western economic structures inevitably predominate and an elite ruling class is selected out through the schools of the developing country schools to perform the functions that perpetuate the prevailing international economic structures. Hence the curricula are always based on Western academics, and the system is highly selective so as to produce graduates who will assure dependency on the West. The general instability of the state further re-inforces that dependency. Pressure for structural adjustment, and its attendant spending reductions on social programs such as health and education, provides evidence to the dependency theorists that the forces of external capital deliberately underdevelop 'peripheral' countries.

World systems theory rejects this as too simplistic. It goes beyond dependency theory to see the political economy as the result of the interplay of a complex mix of interests and cultural factors, not of a deterministic causality of politics and economics. Dependency theory is also prone to the criticism that it does not consider a complete view of the complex interactions that produce underdevelopment such as intergovernmental transfers and indigenous cultural traditions.[55] As

well, the links between school enrolments and economic change it predicts are often weak or inverted.[56]

3.4 Summary of Key Components of the World Systems Perspective

The world systems perspective centres on explaining why planned educational change is initiated and why it very often runs into problems in the long term. It supposes that:

1) There is a transnational pattern of world culture in education driven by Western capitalism and Western cultural institutions. A central feature in the WS perspective is the *fragile state*. which attempts to gain legitimacy by appearing to deepen and broaden mass opportunity for schooling.

2) The fragile state attempts to signal that through this mass opportunity it is possible to participate in the modern world of technology, social progress, and economic growth. The myth creates a paradox of greater demand for education along with limited actual potential for change. The fragile state must therefore decouple itself partially from educational activities so as to avoid too close an identification with the contradictions inherent in the myth.

3) Many international institutions such as multinationals, NGOs, and academic organizations assist in the transfer of Western educational ideas and culture to developing countries.

4) The fragile state has limited options in its attempts to gain legitimacy because of the complexities of local culture and the constraints of the economy. In times of economic crisis, as is very common in the developing world, the patterns delineated by the world system view deepen. There is greater demand for educational reform but paradoxically most innovations do not really address the problem, although they may initially appear to do so.

3.5 Notes for Chapter Three

---

[1] Adick (p. 243) argues persuasively that there is great need for comparative education to find a comprehensive system for educational research and analysis. Too often the great commonality of school practices world wide is ignored, or is dealt with by means of non-integrative case studies. As well non-Western education is often ignored or examined only in special categories such ethnic education or multiculturalism.
[2] Ginsburg et al provide a useful summary of this conflict school of world systems theory pp. 484-489
[3] Ginsburg et al p. 497
[4] Crossley p. 77
[5] Chinapah (p. 30-31) givesa useful overview of this record.
[6] A 1982 World Bank study found that it was not so much educational policy that was at fault but rather poor management capacities. This includes low investment in management, fragmented government and donor efforts, and difficulties in reconciling modern forms of organization to African culture.
[7]. Crossley p. 84
[8] Crossley p. 85
[9] King. p. 85
[10] Chinapah p. 36
[11] "Issues of Relevance in Kenyan Mathematics and Science Curricula"
[12] Lillis 1982 p. 7
[13] "Africanizing the school literature curriculum in Kenya: A case-study in curriculum dependency" (1986) and "Processes of Secondary Curriculum Innovation in Kenya"(1985)
[14] Lillis 1986 p. 64
[15] Cohen et al p. 1222
[16] Chinapah p. 37
[17] Bray in Bray & Lillis p. 212
[18] Rondinelli 1982 pp. 71-72
[19] Jansen 1989 p. 219
[20] Chinapah p. 34
[21] Spaulding passim
[22] Merryfield 1989 p. 40
[23] Heyneman pp. 465-7
[24] Rondinelli et al pp. 11-14
[25] Rondinelli et al p. 18
[26] Rondinelli et al pp. 74, 90. These charts provide a good overview of the choice available. The authors emphasize that specific circumstances are highly variable and encourage users of their ideas to adapt them.
[27] p. 104
[28] source Rondinelli et al p.67
[29] source Rondinelli et al p. 69
[30] Adick p. 244
[31] Boli and Ramirez (1984) in Richard, J. G. ed. A Handbook of Theory and Research in the Sociology of Education as quoted by Adick p. 244
[32] " The Effects of Education as an Institution" p. 75
[33] Mwiria 1990 p. 367
[34] "The Function of Formal Education in Political System" The School Review Autumn 1957
[35] Meyer (1976) p. 365
[36] Fuller (1990) p. 9
[37] Fuller p. 10
[38] Fuller (1990) p. 58
[39] Arnove p. 18
[40] Arnove p. 18

[41] p. 347
[42] Ginsburg et al p. 494
[43] Eisemon 1986 p. 2
[44] Berg-Schlosser p. 1-2
[45] Cohen et al p. 1213
[46] Jansen (1990) p. 26
[47] Lewin p. 129
[48] Lewin p. 125
[49] Carnoy and Samoff (1990) p.75
[50] Berg-Schlosser p. 2
[51] Carnoy and Samoff (1988) p. 354
[52] Irizarry passim
[53] Colclough p. 273
[54] Ginsburg et al p. 497
[55] Maclean p. 39
[56] Fuller pp. 54-57 passim

Chapter Four

Comparative Analysis of Four Reform Programs: Management and World Systems Perspective

4.0 INTRODUCTION: ANALYSIS OF CASE STUDIES BY PERSPECTIVE

Using the operational questions generated from the literature review analyses are presented of each reform. In order to maintain consistency, one perspective, then the other, is presented. As the interpretation of each case is given, no references to the competing perspective are made. In this way the 'lens' of each perspective can be worn in as faithful and plausible a way as possible. Comparisons and conclusions about the relative explanatory power of each perspective have been saved for the final chapter. A short review of the main areas of difference (key actors, conflict models, economics and culture) between the two perspectives is in order here.

The world systems perspective assumes that the key actors in educational reform are found at the level of the state and above. It sees the state in complex relationships with both national and international institutions. There are also other groups within the political environment which affect the outcome of reform efforts such as traditional social groups and elites. The management perspective assumes the key actors as those working within or for the organization undergoing reform, especially those involved in planning and decision-making. While it recognizes that certain political groups can affect the outcome of reforms, it focuses on how key actors can adapt to this reality in terms of implementation strategy.

The model for conflict is another area of difference. The world systems theorists such as Ginsburg, Fuller and Adick perceive there to be perpetual conflicts between the state and other groups within the state's environment. There are contradictions and paradoxes within the world capitalist system and certain groups are always competing for advantage. These conflicts extend beyond borders. Educational reform efforts to create more equity for certain groups within a given society are always affected and constrained by this wider conflict. For example, local elites may depend upon the resolution of class conflicts outside of the national system such as the wage demands made upon multinational corporations. In contrast, the management perspective focuses on conflicts within organizations, especially between decision-makers. There is less interest in conflict at the societal level. School reform

efforts are generally perceived to be a response to societal need such as increased literacy. The policy makers then try to implement and manage a new program or institution. They are limited by resources, organizational design and history, and their administrative abilities. The conflict then is between different groups who are entrenched within the organization, or who affect its functioning.

Different views of culture also characterize these conceptual viewpoints. The world systems perspective is concerned with a world culture that crosses borders. Mass education throughout the world has striking commonality. There is large evidence of the influence of Western capitalist culture that is diffused through a variety of networks. This culture becomes to a large extent mythologized, and the state can make use of it for its own purposes. The management perspective centres more on local and organizational cultures which vary from place to place. The reality of national cultures impinges greatly on the education system and affects the actions of various groups and individuals. For example, the social history of traditional groups and the sense of local ownership of the curriculum are key considerations.

Finally, economic factors separate these two perspectives. The world system focuses on global actors including multinationals, aid organizations and foundations, the World Bank, and other bilateral and multilateral organizations which enjoy persuasive economic power. They are natural conduits for capitalist culture, as well as prescriptors of necessary skills and attitudes for economic success. Thus, economic progress becomes closely tied to Western cultural adaptation. National ruling elites, who tend to be politically influential over educational reform, embody this synthesis of economic and cultural power. In contrast the management view focuses on the economic limitations of a given reform. It considers such points as the incentives for change, the economic efficiency of given implementation strategies, and the impact of budget commitments, or lack thereof.

4.1 ANALYSIS FROM THE MANAGEMENT PERSPECTIVE

Case 1: the SMEA program

When viewed from the management perspective, the SMEA program represents a different kind of problematic implementation than 8-4-4. While the 8-4-4 program was rushed into place with mandates, SMEA grew more gradually and slowly took on government support. It started locally but was administered in a non-consultative, over-centralized manner by the end. It was always oriented to metropolitan values. Key contextual factors were ignored in the implementation of SMEA and proper contingency analysis would have produced better management strategies.

Localization and decentralization

A critical discussion of the localization of SMEA reveals a paradox. In its later stages SMEA was implemented using a coercive strategy that left little room for local input. Yet it was essentially a local initiative at the beginning. The network of teachers, mostly expatriates, who suggested that the SMP materials be adapted for East African use had in mind a local adaptation. The course materials were changed to fit local standards and wording, though indigenous languages, such as Kiswahili, were not used. But it is the very fact that the network was dominated by expatriates at elite schools in all three countries that is the key to understanding the problems of SMEA. It was clearly an equivalency oriented innovation aimed at keeping abreast of developments in the UK, not in developing a Kenyan mathematics curriculum. The support of the SMP organization and the British Council in the early stages also reinforces this conclusion because SMEA began to stagnate when this was withdrawn. At the beginning the ease of transition was thought to be more important than the development of a truly national syllabus and the presence of British and British-trained teachers reinforced this notion.

Metropolitan values

Though Professor Thwaites emphasized that SMP was a practical program based on continuous feedback from real teachers, SMEA soon became a curriculum that was developed centrally by the KIE and then distributed for use. Its adoption was voluntary at first but since the most prestigious schools used it, and it seemed to be a Kenyan curriculum quite modern and different from the colonial curriculum, very soon wide adoption was inevitable. These schools were urban, and well equipped both with facilities and teachers. Their cultural focus was centred on economic and social progress in an urban setting. These were the schools which most closely resembled the former colonial elite and all the power associated with it. The natural process, then, was not to turn to traditional Kenyan culture for input into this program but to the urban centres. Hence the seeds of over-centralization were planted. It was then no surprise that modern mathematics was arbitrarily mandated at the primary level in 1970.

In terms of being indigenized or reflecting a national character SMEA was not very effective. Its guided discovery and small group learning methodologies were very foreign to a system with a strong tradition of lectures and rote learning. As well, it could be argued that the hierarchical tribal culture was also not oriented to guided discovery, but rather by apprenticeship led by experts and elders. In the later stages, when the ineffective or absent in-service of both the teachers and the Inspectors was becoming a serious problem, it was noted that there was a general lack of comprehension of the basic concepts of SMEA. It did not fit anything most Kenyan teachers knew or were trained for. The then (1977) Inspector of Mathematics was of the opinion that SMEA was really an attempt to democratize an elitist conception of education for which there was no philosophic consensus or rationale either in the school system or in the general public.[1]

Internal resistance & lack of consultation

Another implementation problem that arose also stemmed from this dependency on metropolitan schools. This concerned the assumptions about the users of SMEA. Those who designed it took it as a given that there would be an intake of good pupils, sufficient materials and facilities and reasonably sized classes. This was certainly not the reality for many schools, especially the Harambee ones. This created resentment and resistance. Many of the users of SMEA were older, or Asians on the point of leaving the country, and they did not want to be involved in learning a new program. Many expatriates, conversely, had a strong belief in the value of this modern program, and may have also been motivated by employment prospects back home where SMP was in use.[2]

In its later stages implementation of this program was not done in a consultative manner. Both its system-wide mandate and its subsequent abolition were done abruptly and with little preparation. In 1980 only 31 of 1,325 secondary schools were teaching the traditional mathematics, but by the next year all schools were back to it.[3] This included the late adopters who had resisted implementing SMEA up until 1978 because they had few resources to draw upon. There was very little preparation time given and no provision of materials or support for the switch. There was no research done on the KPM, or Kenya Primary Mathematics, in terms of how it prepared students for secondary school nor any discussions with teachers about the connections between primary and secondary math. In fact the KIE Mathematics Panel expressed misgivings on this very point in 1974-75 but nothing was done.

Contextual factors

SMEA was based on the doctrine of transferability which argues that after research is done, some curricula can be transferred anywhere regardless of the cultural milieu.[4] In fact, the culture of the schools of the early adopters of SMEA was quite similar to the culture of those who originated it in Britain. Therefore, at first the exam results and teacher satisfaction were quite acceptable, which appeared to confirm this doctrine of transferability. Many of the teacher-writers of SMEA were drawn from these metropolitan schools. Little actual research was done for the application of SMEA in a larger cultural context. When the

UK support for in-service was withdrawn in 1972, there was no research done to discover what further in-service was needed or what the adoption patterns were. There was no longer an opportunity for teachers from peripheral schools to interact with their metropolitan colleagues. They were left with the Teacher Guides produced by the KIE. The KIE closed its Department of Mathematics, having finished drafting the syllabus, and left the supervision to the Inspectorate which had no means to adequately do so. Many teachers were left isolated and unable to give input or receive training. It was a fundamental flaw in the implementation of SMEA that bureaucratic reality for many important actors was not considered.

Contingency analysis

In terms of Rondinelli et al.'s model of contingency analysis, there were some serious administrative errors in the implementation of SMEA and the math syllabus that replaced it. The degree of environmental uncertainty ranged from moderate to high. This conclusion is based on several factors, including the large number of institutions involved, the high income disparities in Kenya, the significant influence of foreign organizations, unstable funding, and the high pace of change between government and other key groups. The degree of innovation was high due, in part, to the many institutions involved, the imprecise objectives, the lack of guidance or models, and the high professional skill requirements. There should have been assessment of the management capacity to achieve the change in the light of these problematic factors. In this case, the administrative enhancement would probably have focused on a large scale teacher education program. This was a difficult innovation to implement on a system wide basis without research on how it would affect so many groups.

With this innovation, participation of the front-line users should have been a key consideration because it required a major conceptual and attitudinal change. The management strategy should have been an adaptive, not a mechanistic, one.[5] By this is meant that the changes envisaged by the program had to have some elements which could be adapted to local preferences, needs, and professional traditions rather than consisting of rigid ideas to be adopted without either alteration

or even comprehension. With these adaptive strategies some organizational decentralization is required to encourage participation and allow valid monitoring of change. This decentralization was conspicuously absent with SMEA.

Two of the most obvious contingencies to consider were the support of foreign agencies, and the research that was being conducted in the UK on SMP. It is surprising that even though support was withdrawn in 1972, and the negative consequences of this were soon readily apparent, the government decided to proceed anyway. No alternative sources of money or personnel support were sought. The research on SMP texts, summarized in 1968, found there were a variety of problems surprisingly similar to those encountered in Kenya. These included inappropriate cultural exemplification, difficulty of mathematical conceptualization, and attitudinal problems of staff and students.[6] No use was made of this research either for teacher in-service or improving management capacities to address these problems.

Summary

From a management perspective SMEA suffered from poor implementation strategies which failed to take into account the differences in resources and values between an elite group of metropolitan schools and the wider school system. It needed better planning and teacher support, and less dependence on foreign support and centralized administration. Research on how the program was actually functioning, or how it might be altered to improve implementation, was either ignored or not done at all. SMEA represents a textbook example of the importance of knowing in detail how users react to an innovation, and of the need to choose appropriate management strategies to help them cope.

4.2 Case 2, the 8-4-4 Program

The 8-4-4 program from the management perspective represents a case of reform which has been fully implemented, but due to bad management has only partially achieved its goals. In some aspects it has actually worsened the situation it set out to improve. Regional disparities have worsened and rather than improving vocational and practical training, 8-4-4 has increased the elitist, academic character of Kenyan schooling. If it had been better planned, using the important principles of successful management, it might have been dramatically better. It was weak in the area of localizing inputs to the new program, and in organizational decentralization. The reform was done in a top down fashion that virtually ignored bureaucratic and political resistance of key actors, although the government became obliquely consultative at certain points. Planning for contingencies such as economic constraint, systemic problems, political uncertainty, and the need to depend on foreign support was poorly done.

Localization and decentralization

There was little or no localization of inputs in the 8-4-4 program. In spite of the recommendations of the Working Party was it mandated abruptly, an indication of a political climate that would brook no opposition. In terms of the work of the Kenya Institute of Education, or KIE, on the new syllabus, the teachers union did have a presence, as it did on the exam council, or KNEC. However there was little time given to consider criticism about content or implementation. Such talk was "anti-progress" and the choice was for participants to "praise the programme unreservedly or shut up."[7] Even now no formal evaluation system is in place for 8-4-4, although the Ministry has made some changes to it. It has been pointed out that it is the KIE which has submitted reviews from time to time, but that this was also the organization which designed and implemented the program. It also wrote many of the textbooks. The result of this is a kind of organizational in-breeding which results in a 'facade institution' with an internal culture quite removed from reality.[8] No objective external review has been conducted of 8-4-4.

Decentralization was conspicuously absent in this case. For example, parents have also sought to influence the activities of schools under the 8-4-4 program, largely because they have been asked to provide much more money and facilities than before. Their complaints centre around headmasters whom they blame for the declining standards and inept financial management. The Ministry and the Teachers and Heads Associations have closed ranks on these criticisms, declaring that established procedures must be followed, and that Parents Associations should work with legal, accounting, and educational expertise if they are to advise headmasters.[9] Realistically, this is not likely to happen in the near future.

In terms of decentralization of organizational activities and decision-making, there has been no change in the operational structures of the Ministry from before 8-4-4.

In terms of giving choices and involvement to those who must implement the changes that 8-4-4 would bring, little was done. For example, in the teaching of practical subjects, there were serious shortages of equipment, qualified teachers, in-servicing, and school supervision. The curriculum was mandated, and that was the end of it. In the course of the eight-year lifetime of 8-4-4, these obvious deficits have been well-documented both in the media, and at the academic level. Even the Kenyan medical association voiced concerns about stress on students.

Metropolitan values

In terms of dependency on metropolitan values 8-4-4 has changed little from the previous system. The language of instruction and core content are essentially the same. There are some options for some arts students to omit vocational subjects like home Science and Woodwork, but these must be replaced from among the following: French, German, Music, Accounting, Commerce, Arabic or Office Practice. The chances that a rural school will have qualified teachers and/or equipment for these options is low, again suggesting a bias towards elite urban schools. Another change is that Kiswahili is now a common university entrance requirement with the same weight as English. This has led to lecturers' complaints about the quality of some students' English. It can only be

concluded that the urban academic values continue to be a main stimulus for the system.

Consultation and resistance

The government has responded to the problems of implementation only reluctantly, and made major changes on two occasions. The first was in July 1992, when it reduced the content of the syllabus in primary school, and dropped from 10 to eight the numbers of subjects at the secondary level. The second major change came in May 1993 when a *de facto* return to the former O level system was announced. 8-4-4 will remain in place but the students can now drop practical subjects (only about 40% of schools have labs anyway) and they can cluster their subjects into science or arts, as they could in the former system. It should again be recalled that no decentralization of decision-making has taken place. The government has only given in to the reality that marginal and rural schools could not conform to its previous dicta.

The government still continues to operate in a non-consultative manner without regard for the stakeholders in the system. For example, the Ministry is still insisting on a heavy course load at the primary level in order to prepare students for work. One direct consequence of this is that few schools close for the April holidays because students need time for cramming.[10] It seems typical of the arbitrary management of 8-4-4 program that the pedagogical and morale considerations of no school holidays are rated as unimportant.

Another group of key actors not given consideration is from the academic sector. They suffer stress because of the less well prepared students and systemic overload, but also because of the high costs of the 8-4-4 program. There are now four universities processing greater and greater numbers of students, but the university budgets are severely constrained. The dependence on foreign personnel and donor support is quickly increasing, which in turn increases uncertainty. What began as an attempt to re-make Kenyan education in a form different from its colonial origins has resulted in a new dependence on external resources.

To a large extent the implementation of 8-4-4 has not taken into account the bureaucratic realities and resistance of key actors. These firstly have included ordinary teachers whose apathy and hostility

towards 8-4-4 is at a significant level. There has been little in-service or material support for them. It has been reported that in some subjects, like mathematics, the teachers are not trained well enough, which has in-turned caused academic failure and 'wastage' at the upper levels. In addition, the extra year of primary schooling has necessitated the hiring of thousands of untrained teachers. The net effect of such a flood of poorly supervised, unqualified teachers on qualified ones is quite significant. The latter must take up the slack both as mentor-associates and by coping with less well prepared students that these untrained teachers pass onto them. Secondly, those charged with systemic logistics, such as dealing with two streams at the university level, have been given nearly impossible tasks.

This brings up another key actor whose position has not been considered: the student himself. There have been frequent outbreaks of student unrest, and many accusations of unfairness to them against the government. The chaos and frustration of changing entrance requirements during the implementation period, the unavailability of places for qualified students, and requirements to study practical subjects without enough equipment have all contributed to student dissatisfaction. It is not surprising that anyone who can afford it considers private educational institutions.

Contextual factors

It is not surprising given the administrative style used in this case that morale is low, and qualified personnel are in short-supply. Sudden decisions, such as the one by the President to find room for 3500 additional students, and then the next year to reduce intake form 21,000 to 10,000, can only be disheartening and destructive in the long run. As a rationalization of its policies the government sticks with a meritocratic philosophy. The user-pay schemes and emphasis on 'traditional' values of manual labour have become excuses for bad planning and a dispirited organizational culture. Parents are asked to pay more and more, and the competition grows keener, fed by the media listing the top 50 schools and with headlines like "Easy time for the well-prepared". The larger context for these kinds of statements government cutbacks in educational expenditures have been worsening

since the 1970s, and educators have been seriously under-supported for years.

Contingency analysis

There were some important contingency factors that the implementors of 8-4-4 did not consider. To review briefly, Rondinelli et al.'s model calls for an assessment of management requirements and management capacity as it relates to the level of environmental uncertainty and to the degree of innovation.[11] Following their criteria, the level of uncertainty at the time 8-4-4 was initiated was moderate to high, because, among other things, of the variety and number of actors, the high pace of change, the large influence of the international economy and instability of funding. The degree of innovation was also high because, among other things, there was a short completion time, little guidance from models, many institutions involved, and many components to the innovation.

There is little evidence that these factors were considered. The first step under the model should have been a large new investment in the management capacity of the Ministry to complete the task. Consider, for example, the changes to the technical training and certification system under 8-4-4. The management plan was basically to have relevant Ministries liase and 'sort out' the whole new system. It was unrealistic to assume that each of these many groups could come to a working consensus on such issues as budgets, staffing, physical facilities, and administrative structure, simply because they are told to. There was no group charged with facilitating this task or addressing shortfalls in management capacity to complete it.

Worse yet, it was admitted that this rationalization and harmonization was keyed into a complete revitalization of the image of Youth Polytechnics and Farmers Training Centres.[12] This large task was complicated by many factors such as the economic reality that there are few still few jobs available. Currently in Kenya interest in academic subjects remains very high and access to jobs may depend more on personal contacts than vocational credentials.[13] As well, there was inadequate budgeting for these management activities, just as there was inadequate funding for many aspects of the 8-4-4 program.

Summary

From the management perspective, there were several serious errors in the implementation of the 8-4-4 program. It has been characterized by abrupt decisions, lack of consultation, weak decentralization, naiveté about bureaucratic resistance, and unrealistic contingency analysis. Some of its restructuring goals have been met but few of its curricular or socio-political ones have.

4.3 Case 3: The ZIMFEP Program

When viewed from the management perspective, the ZIMFEP program can be seen only as a very modest success. Some of the strategies in its organizational design and implementation were *initially* good, particularly in the creation of a different style of school outside the central system. However, in terms of its larger goals of spearheading a new socialist curriculum for Zimbabwe and realizing a true integration of work and education, ZIMFEP has not been successful. This has been caused by a failure to localize key pedagogical decisions, weak logistical support, and poor contingency analysis.

Localization and decentralization

The radical departure from traditional methods that ZIMFEP schooling envisaged required a fair degree of organizational decentralization. The participants were expected to restructure their education system to integrate it with work and the economic activities of the local community. Therefore there had to be some independence from regular system. This required material, financial, and curricular support which was in fact initially provided. Farms were purchased, a system for recruiting students, especially ideologically committed ones, was put in place, and most importantly, an organization (ZIMFEP) was created to administer the program. It was to be explicitly independent of the Ministry, although the head of the ZIMFEP board was also head of the Curriculum Development Unit at the Ministry. An indication of the high level political support accorded the Unit was the appointment of Fay Chung as head. She was subsequently the Minister Of Education, an

appointment which hinted at the contradictions ZIMFEP was later to suffer from.

More decentralization came in the form of support from the van Rensburg movement in Botswana. There was a regional EWP Board of Directors based in Botswana which gave guidance and access to personal networks to ZIMFEP. Although some Europeans were involved, the director was a Zimbabwean. In statements on education the Ministry frequently emphasized the independence of ZIMFEP from the government. The decision-making system was to be explicitly local and democratic. In the early years it had a strong ideological flavour, and many efforts were made to be consultative concerning the activities of the co-operatives. Liaison with other co-operatives in the region was quite frequent and there was a sharing of knowledge and expertise. Unfortunately all of these efforts were handicapped by one serious design flaw: the key schools were still required to prepare students for regular academic exams.

Metropolitan values

Despite being an attempt to step outside the conventional forces of the market, and pressures of credentialism, the ZIMFEP schools were affected by them. As the students began to be drawn from the conventional groups that fed other regular schools with them came the natural draw towards getting a certificate and migrating to urban centres. The integration of the school with the local community, as envisaged by the van Rensburg model, did not occur, perhaps because the students were too busy with their full academic load and their production activities. The economic growth that would enable the schools to choose an independent pedagogical path did not occur. In fact a dependency relationship emerged with the Ministry and administrative functions located in the urban centres.

Internal resistance

The schools were not actually pedagogically very different from regular schools. The students had to write the same Cambridge examinations, and over time the productive activities of the schools began to be seen as an impediment to this task. They were laid on as an *addition* to the academic workload. Not surprisingly many students began to resent the EWP activities. Their negative attitude was cited as a serious problem by their teachers. The natural resistance of these two key groups, teachers and students, was not considered extensively. For example, Chivore concluded that the ZIMFEP program, far from leading the way in socialist education, only produced a negligible interest among students in working in co-operatives or in self-employment.[14]

It may be that the ZIMFEP schools began actually as a form of economic compensation for ex-combatants; but when the characteristics of the users changed, no organizational adjustments were made. These new students simply needed a place in a school and accepted the basic education with work ethic ZIMFEP propounded. The result may have been a case of a "facade institution" wherein the outside features appear to be radically different from previous institutions, but in fact there was no real change. There is also evidence in the ambiguous attitude of the Ministry itself, or elements within it, which did not view ZIMFEP as a viable program.

Another area of resistance to the ZIMFEP schools came from their resemblance to the so-called F2 schools which were widely disliked vocational institutions under the white regime. There seems to a negative association in the minds of many between manual and rural work and education. There is still a keen interest in academic credentials, no doubt fostered by the continuing expansion of the whole Zimbabwean education system, and in spite of a scarcity of academic places and jobs. In addition, the record of the government in the establishment of socialist curricula has been dismal. The only other major attempt was the creation of the Political Economy of Zimbabwe syllabus, or PEZ, in 1987. It was met with large scale resistance from many groups and somewhat ignominiously withdrawn shortly afterwards. The interest of the general public appears to lie where the actual policies, of the government lead, in individual progress upwards through a capitalist

system as opposed to the public rhetoric of socialism. For ZIMFEP schools to become leaders of socialist curriculum development, there would have to have been a fundamental shift towards a new curriculum quite different from the Cambridge system, and a large re-socialization program for Zimbabwean society as a whole. Instead, there remains a propensity towards metropolitan values such as academics, non-manual labour, and large scale business (as opposed to small scale self-employment) that has handicapped the ZIMFEP program.

Contextual factors

There is ample evidence that the organizational realities for the ZIMFEP schools have not been well considered. These problems may have been aggravated when the emphasis of the government shifted in the mid 1980s from the idea of socialist collectives to production units which pay their own way. The government may have presumed that ZIMFEP had access to foreign donor resources. As the economic squeeze became tighter, the notion of EWP was applied to all Zimbabwean schools, and the ZIMFEP ones were no exception. Over time it became clear that the support for the schools was going to be much the same as other schools, that is to say low. The ZIMFEP schools began to suffer similar shortages of personnel, textbooks, and facilities. The localization of the decision-making simply became a way of letting the schools cope with the shortages however they saw fit, but without government support. ZIMFEP began to depend upon the support of donor agencies such as DDC from Australia which gave it $190,000 US for a management adviser. These shortages further necessitated the hiring of expatriate teachers, many of whom were given no training or in-service in terms of the EWP ideas. Education officers were also criticized as being unhelpful in ongoing supervision and the implementation of EWP concepts. Another serious problem was the lack of transport vehicles needed for running programs on large isolated farms, the provision of which may have been an unclear responsibility. Clearly there was a need for re-education of the support institutions that the implementors failed to consider.

Contingency analysis

The societal contingencies noted above were not extensively considered by the implementors of the ZIMFEP program which may explain why it has stagnated at the enrolment levels of its pilot status. There was no expansion of management capacity to achieve the socialist goals which were first envisaged. Using the contingency analysis model of Rondinelli et al., the level of environmental uncertainty was moderate due to such factors as the relatively small number of institutions involved, the moderate government support, the diverse funding sources, the slow change of pace of economic structures, the large income disparity, and the high degree of political and ideological differences. The level of innovation was also moderate due to such factors as fairly precise objectives, the long time frame for change, the existence of models for guidance and the fact that some of the skills were not new. Other skills did require development, such as democratic consensus building.

Given these considerations, Rondinelli's model would call a decentralized system[15] in which project units are relatively free to implement local programs but can draw upon the functional resources of the level above. This structure assumes that there are management and professional resources available at this upper, central level. This, in fact, roughly approximates the theoretical design of the ZIMFEP program. However, the project units, i.e. the schools, did not have a lot of freedom, for example, to develop local certification programs, nor were the necessary resources always provided. On the question of creating a socialist curriculum, little guidance was given in the form of performance-based plans or incentives for individual achievements. Such guidance would have encouraged local initiatives. The decentralized system was not actually implemented, and so it never functioned as it should have.

The government had mandated that EWP be used nation-wide even though no evaluation of the program at ZIMFEP had been done. Consequently there has been a highly varied response from the regular schools. Some have used EWP as a source of cheap labour while others have essentially ignored it. Clearly the individual ZIMFEP schools had failed, or were handicapped in some way, in creating the organizational

dynamics or culture that were necessary to energize a socialist transformation. An indication of this is the complete lack of interest among ZIMFEP students in practical subjects which were intended to be the basis of EWP. Obviously it would be highly problematic to try to implement a reform which was not viable in its pilot version.

Summary

From a management perspective, The ZIMFEP program showed great promise during its early stages, particularly because of its decentralization. However, the central handicap of the program is that it uses the same exam system as other Zimbabwean schools. This, combined with low support and ignorance of organizational realities, has made further expansion of the program problematic. Important contingencies were not considered, and the organizational design has not been adhered to in the process of implementation

4.4 Case 4: The ZINTEC Program

When viewed from the management perspective, the ZINTEC program has been modestly successful. Although there have been some errors in administering the new teacher training system, and a critical lack of resources at some points, on the whole it has met its goals. Over its 12 year life span the program has grown and been refined such that the ZINTEC model has become the accepted norm for teacher training in Zimbabwe. It has even had spillover effects on adult literacy and on distance education. However, larger systemic questions have arisen from this success. The quality of education has plateaued or even declined, and the viability of teaching as a career has seemingly been reduced. The educational objective of transforming society through new teacher roles as socialist innovators and community builders has clearly not been met.

Localization and Decentralization

One of the problems facing the designers of the new teacher training program in Zimbabwe was the wide array of already established institutions. Under the previous regime there had been a *de facto* racial

segregation in the training system, with whites tending to go through the three-year University program while Africans mostly attended lower level primary school teachers colleges. A new program was needed that could satisfy the suddenly large demand for teachers, and not be bogged down in inter-organizational wrangling. This was done through a complete re-organization of existing teacher training resources and personnel. Clear lines of administration were drawn and the Distance Education Centre (first called the ZINTEC National Centre) was given the explicit task of "homogenizing" distance education materials and standardizing the quality of trained teachers. Eventually a three- year (theory plus practice teaching) program was instituted nation-wide. At the same time, specialized tasks such as retraining unqualified teachers in the field have been delegated to certain colleges, which could be termed a modest decentralization. These changes were the result of two interim evaluations in 1982 and 1986 and reflected a practical and flexible approach on the part of the ZINTEC implementors. The increased output of relatively trained teachers has been quite impressive, and the new norm was quickly established. This helped to overcome early resistance among students towards ZINTEC and their preference for the 'superior' programs of conventional colleges.

Despite these indications of decentralized decision-making, decentralization was by no means entirely successful. The implementation strategy of ZINTEC not adequately anticipate the resistance from teachers or established key actors. For example, there was resistance in some quarters of the teacher training community; some staff preferred to trust their own expertise and did not identify with the objectives of a political transformation laid out under ZINTEC. There was also resistance along lines formed in the colonial era which saw colleges as inferior to universities, and ZINTEC as further dilution of training quality because it contained less theory. The frequent changes in the configuration of the ZINTEC program, for example from three to four to three years, are a result of this interplay of various resistors and proponents.

Another important factor impeding the decentralization was the widespread inability of headmasters to adequately supervise student teachers. The student teachers were to learn the practical skills of

teaching from their headmasters and veteran colleagues. In actuality, very little of this occurred for a variety of reasons. Firstly, headmasters themselves were completely overburdened by teacher and textbook shortages, and inadequate facilities. Headmasters were more used to the subordinate role of taking orders from superintendents rather a position of having to make independent decisions. At many of the newly opened 505 rural day schools, headmasters were usually only primary-trained 'teachers in charge'. Secondly, the veteran teachers tended to look upon student teachers as low status persons who had yet to 'pay their dues'. Thirdly, the student teachers themselves carried a full teaching load as well as doing college assignments generated by the Distance Education Centre. The college supervisors and Ministry Educational Officers who did visit these students infrequently often only had time to check the completion of their laboriously written out daybooks. These failings serve to illustrate the point that the implementors needed to localize the decision-making to a greater extent so as to identify and address such problems. In many cases the ZINTEC practice teaching system was merely an exercise of *appearing* to conform to nationally set standards.

The centralized administration of ZINTEC appeared to be a root cause of other problems. The appeal of the ZINTEC scheme at the beginning was its economy. It required no new colleges to be built, existing personnel could be re-deployed, and the student-teachers would begin to shoulder the teaching burden very quickly. At any one point 50% of them are in the field. However, as the management perspective points out, it is easier to ignore the realities of front-line users if there is a large centralized system. This occurred to a large extent and it fuelled the discontent of many teacher trainers. Very quickly the shortages of texts, transport, expense money, photocopying capacity, and most importantly, supervisory time became acute.[16] The numbers of students the trainers were required to supervise soon became unmanageable. In addition there was and is a great need for training equipment of all kinds, especially scientific and technical. Inadequate funds exist for training trainers outside Zimbabwe and there continues to be a worrying exodus of technical trainers into the less stressful and more remunerative private sector.

Metropolitan Values

One of the contingencies that should have had much greater consideration was economic limitations of Zimbabwe to sustain such an expansion. It has led to a new dependency on expatriate expertise at the college level and demand for expatriate teachers at the classroom level. This in turn has tended to orient the program around urban values. The effect of this pedagogically is difficult to assess, but it is clear that it did not help to address the larger goals of using teachers as socialist community builders. Many of the expatriate classroom teachers were very experienced and well qualified, even with the Cambridge system, but were generally not involved in the supervision of student teachers. They also lacked a cultural and linguistic connection to local rural communities. The fact they were not used to help train student teachers was perhaps a waste of a valuable resource but to involve them might have been politically untenable. Expatriates, despite their generally excellent service record, also brought with them obvious signs of Western affluence and urban culture.

The expansion of the ZINTEC program has brought a new dependency on foreign capital and donor organizations such as USAID, WUSC, and the British Council. For example, $81.7 million was loaned to Zimbabwe under the 1986 ZIMCORD plan to finance the ZINTEC scheme.[17] More recently a 1990 report on education on Zimbabwe found that shortages in training capacities and technical equipment were quite critical. These shortfalls almost certainly will require foreign currency and assistance to be made up. The organizational effect is one of de-stabilization because such funding and personnel support cannot be guaranteed. Furthermore, it makes more problematic the notion that ZINTEC is a truly national program.

Whether this will result in a natural drift towards the metropolitan values associated with the foreign influences is also open to question. In a centralized organization like ZINTEC it seems likely that these foreign inputs will reach the urbanized administrative areas first and the rural areas last. Zimbabwe's continued use of the Cambridge examination syndicate is likely to skew the system in that direction in any case. Another shortfall that has been noted in the implementation of ZINTEC is the absence of an overall teacher training

curriculum plan, notably one which addresses the lofty objectives concerning the political transformation of Zimbabwean society and the integration of theory and work. The EWP theme has been a consistent one in Zimbabwean education but rarely has it been effectively put into practice, as the cases of ZINTEC and ZIMFEP show.

Non-consultation and internal resistance

As has been discussed above, the implementors of ZINTEC have been weak in the consideration of key actors. Headmasters, college staff, and Ministry bureaucrats have all suffered from a variety of non-consultative and poorly planned changes. Material and fiscal shortfalls have especially handicapped the centralized administrative system. An example of these bureaucratic problems is the complaint that students often are not paid for months at a time due to improper processing of forms. Poor postal services and communication systems also have greatly interfered with student feedback. It is difficult to develop organizational loyalty or institutional memory when such problems continue to plague the training program. Organizational resistance increases and efficient use of resources declines. A good illustration of this can be noted in the general unattractiveness of teaching as a profession. Several studies have shown that the low salaries, difficult syllabi, poor teaching conditions, and inadequate in-service have all contributed to the unpopularity of teaching.[18] It follows that the experience of teachers in their training would have clearly indicated that they were entering an organization that will not supervise or support them well. Although the number of qualified teachers in Zimbabwe rose significantly, the expansion of the school system has outpaced it and a large proportion of unqualified teachers is still employed. This further taxes the systemic capacity to provide valid, on-the-job training for new teachers.

Contextual factors

In terms of considering important contextual factors the ZINTEC program had a couple of serious shortfalls. Firstly, the heavy burden that the rapid expansion of schooling in Zimbabwe in general placed on established schools took away much of their organizational energy.

Headmasters were trying desperately to manage teachers whose classes had doubled in size nearly overnight. There were shortages of all kinds from textbooks to boarding places. Most headmasters were glad to get any teacher at all, and were more likely to hand student teachers a full teaching load and move onto the next problem rather than act as their mentor or coach. Secondly, many of the established schools in the country were administered by religious organizations. The salaries of the teachers were paid by the government, but much of the administrative decision-making was done in conjunction with church boards. No attempt was made to liase with these authorities beyond requiring that they, like other schools, participate by accepting ZINTEC teachers. Given the teacher shortages they were quite willing. However there was no attempt to assess how this dual authority system would affect ZINTEC program.

Contingency analysis

The Rondinelli et al. model for contingency analysis has some useful application in assessing ZINTEC. The degree of environmental uncertainty for this program would have been rated as high because of the high number of stakeholders, the diversity of the funding sources, high number of administration levels ZINTEC was responsible to, the pace of change in leadership, and the high impact of political change on the administration. The degree of innovation was also high due to such factors as short completion time, the large number of institutions involved, the wide geographical coverage, the high new skill requirements, and the functionally diverse tasks. Since both these variables were high, the establishment of an on-going monitoring system was appropriate.

Environmental uncertainty and degree of innovation were considered in the redesign of the teacher training program under a national directorate, which may in turn account for ZINTEC's modest success. There were surveys of staff and students in 1983 concerning useful functions and methods of teaching colleges.[19] It has been pointed out in several studies of ZINTEC that the scheme depends upon the close professional supervision of the students. However, as has been shown, this was still inadequate in many instances. The management assessment did not reflect a great need to invest in professional development of

teacher trainers. Now in the 1990s this need is still quite pressing, and a more in-depth management assessment is necessary if ZINTEC is be successful.

In terms of the contingency model, ZINTEC has a serious flaw in its administrative co-ordination. The functions of ZINTEC call for a "professional-adaptive" form which includes negotiated authority and budget, prestige, moderately high need for commitment and incentives, and facilitation among other things. The form more commonly seen at ZINTEC is "mechanistic"; it uses command authority, externally allocated budgeting, low commitment, and low incentives. It is not surprising then that there has been resistance and attrition at the college level.

Summary

From the management perspective ZINTEC has had an impressive record of quantitative improvement in teacher training and has evolved a new and useful model for teacher training. However, the qualitative results have been less impressive because of poor implementation support and weak administrative. The program faces critical shortfalls that compromise its ability to properly supervise its students. In terms of meeting its higher social and political objectives, ZINTEC still has some distance to go. The curriculum efforts at the National Distance Education Centre do have good potential though, if more support for the professional activities and development of teacher trainers can be found.

4.5 ANALYSIS FROM THE WORLD SYSTEMS PERSPECTIVE

Case 1: The SMEA Program

The SMEA program, when viewed from the world systems perspective, is a good illustration of the cultural and mythological power of schooling. Unlike the 8-4-4 program, which contained specific signals of economic modernization, SMEA held forth the promise of participation in the modern culture of technology, and its literature, mathematics. Since it was an equivalency oriented reform it was explicitly Western and metropolitan in its values, assumptions, and support structures. Its origins were semi-private and small-scale, but within a few years the government seized upon it as a useful innovation for its own purposes of legitimacy. It was poorly piloted, then mandated and then suddenly abolished--all in a fashion typical of the fragile state.

The fragile state

The fragility of the state can be seen both in its arbitrary style of management of SMEA, which required conformity but did not include support, but also in its eventual rejection of the program. The first introduction of SMEA coincided with the birth of independent Kenya, an era of many equivalency oriented reforms. The state was not extremely fragile and may have even enjoyed substantial support while the new government found its feet. Expectations were high though and educational expansion was rapid. It was not until a few years later, when it became clear that many of the promises of educational expansion were not soon going to be fulfilled, that the state needed more legitimacy. The elitism and regional disparities that had long been a source of political unrest in Kenya needed some response. Added to this was the subtle pressure exerted by the elite urban schools, with many demographic connections to the ruling party, to be have "progressive" curriculum. SMEA had seemingly been made 'Kenyan' by the Kenya Institute of Education, or KIE, which wrote the texts and teacher guides, a development that the state could use to suggest SMEA was a post-colonial, 'nation-building' syllabus.

Decoupling

The fact that this program was initiated outside the Ministry of Education, and subsequently approved, allowed for a natural decoupling. It was viewed as fully tested (in the UK) and therefore ideal for the rapid expansion of schooling that Kenya undertook in the 1960s. In spite of the fact that proper study had not been done into important questions such as the potential transferability of the program, and the patterns of its implementation, it was mandated for primary schools and subsequently for secondary schools. Research reports about SMP from Britain were virtually ignored, perhaps motivated by a desire to signal anti-colonialism. The KIE simply wrote the texts and teacher guides but did little else to support the curriculum by way of in-service training. This was left to foreign groups who withdrew in 1972 when faced with the daunting task of training large numbers of teachers in the outlying areas.

What this suggests is that the state was ambiguous in its support because it was using the reform for the purposes of its own legitimacy, and it therefore tended to rely on central dictates for its implementation. From the world systems perspective, the state was forced to resort to more and more centralized control as economic constraints increased. Yet this undermined its pursuit of legitimacy in the long run. The state did not have the capacity to support SMEA and it thereby lost integrity and legitimacy value. Furthermore, as the state became more dictatorial, it became more clearly the sponsor of an urbanized curriculum that alienated groups the state wanted to draw in.

Myth of modernity

The SMEA program had strong potential for indicating Kenya's transition into modern society. The curriculum was thoroughly modern in its emphasis on mathematics as a literature to be discovered and enjoyed, rather than as tedious drudgery. In mythological terms the traditional math signalled a colonial clerkship while SMEA signalled a modern professional. SMEA was also founded upon the then popular model of scientific curriculum development, with its three stages of research, development and diffusion. Once tested, it was presumed to be transferable anywhere. Science was thus seen as always enhancing

culture. In that initial period of rapid educational expansion and economic boom, such thinking was much more plausible than in later times of contraction and recession. The former Chief Inspector for Mathematics described the SMEA program as drawn from an elite, liberal culture. In the 1960s nothing could have seemed better than to strive towards this culture with all its freedoms and power, especially in that early period when memories of colonial repression were still fresh. The mythic power of SMEA also stemmed from its early adoption by the high status schools in Kenya which so closely resembled the elite liberal ones in Britain.

International influences

One of the most striking features of SMEA from the world systems perspective is its Western cultural origins. The reigning international culture of science and technology resonated with many of the ideas of national development such as mathematically predictable labour growth, advanced industry and modern agricultural methods. Although there was a natural movement to 'Africanize', many of the personnel and the technical support were found in the West. Expatriate expertise was often sought, though with the control given to Africans. SMEA was derived directly from such circumstances through a network of expatriate teachers in East Africa. They were in close contact with pedagogical ideas in the UK and took the SMP project as more or less a straight model. There were some adaptations for exemplification, terms, and time frame, but it closely resembled its British equivalent. The SMP group was actually a direct supporter, and funds for further curricula and in-service training were provided by foreign organizations.

Ironically, in the metropolitan areas SMEA fared much better for a variety of reasons, from better facilities and smaller classes to a greater harmony of cultural values within the school community. The mostly expatriate teachers and their Westernized urban elite students became readily engaged with the curriculum, whereas their rural counterparts were conceptually quite distant from it. SMEA became a reform which signalled modernity, but only certain groups could relate to it.

Short term appeasement and long term legitimacy crisis

As the tide towards using SMEA swept through the system, two forces could be seen at work which affected the fragility of the state. One was the practical response of many schools to the mandating of modern mathematics at the primary level. Those schools viewed it as inevitable that the whole system would adopt the program and thus did so on their own. Significantly these schools tended to be the high status urban schools which may have been more closely networked to the originating schools or which possessed the resources to make the change (such as qualified teachers, money for new books, etc.). The second force was the cultural power of the 'centre' dragging along the 'laggard periphery' with it. The world systems perspective contends that this force has limited use for the fragile state because as the state extends its influence into the periphery, the environment becomes much more turbulent. In the periphery we find the low-status schools such as the poorer government schools and rural Harambee schools. In this context the legitimacy of the modernity myth was placed against the durable power of traditional social relations. The state had weak administrative infrastructure here as well. The connection between the state's rules and governance and its resultant social rewards became worn down. In the final period of the SMEA program the state found itself between these two competing environments, unable to gain legitimacy from either one.

To further compound the state's difficulties, the period of the late 1970s was one of severe economic downturn. The usual response of the fragile state to this is to emphasize central bureaucratic control, which is what the government tried with SMEA. However, this strategy does not lend itself to nurturing interdependencies, and before long the state was forced to turn against its own policies and abruptly abolish the program.

Whether the decision to abolish SMEA came in response to the chorus of criticism, or in recognition of its ineffectiveness (as implemented) as a curriculum, it did gain the state some breathing room. This respite in the legitimacy crisis was used well by the state. SMEA had been frequently portrayed as an elitist academic exercise with colonial origins. It was accused of not providing the math skills needed

for day-to-day applications, a charge which could in turn be tied to the growing problems of economic stagnation and unemployment in Kenya. Therefore the state, in making this change, could be seen as attacking national problems. That these problems reflected the wider realities of global capitalism, such as dropping export prices, foreign debt problems, and regional political-military conflicts, was naturally not widely articulated by the state. The government had an alternative, the traditional syllabus, which it then re-instated. It is no accident that the Presidential Working Party, whose efforts three years later would result in the 8-4-4 restructuring, began its work shortly after SMEA was abolished. The state could argue that on an interim basis it had effected changes which had been called for by many groups, and it would soon embark on a more massive and more fair broadening of educational opportunity.

Summary

SMEA, when viewed from the world systems perspective, is a good example of the difficulties of the fragile state in trying to escape from Western influences on education. Furthermore, the contrasts between urban and rural political cultures in this case show the limitations of mythology for legitimacy purposes. The state could not expand educational opportunity beyond its economic capacity to support it but the use of the modernity myth was not ultimately effective either. That the state finally became coercive is indicative of the challenge of linking a particular curriculum to notions of nation-building and participation in the modern world.

4.6 Case 2: the 8-4-4 Program

When viewed from the world systems perspective, the 8-4-4 restructuring of Kenya's education system reveals a typical situation for a fragile state. The state was caught in a turbulent environment and, perceived as failing to address the inequities in Kenyan society, it began a re-structuring of the school system to re-legitimize itself. It was a wide-ranging effort: the 8-4-4 program claimed to address unemployment problems as well as impart skills for functioning in the

modern Kenya. The influence of Western style schooling was pronounced. The mix of interests in the environment was complex and dynamic and the state's response was characteristic of the fragile state: it tried to mediate between many political interests while carefully guarding its prerogatives through political repression. The demand for schooling has remained still high which the state continues to foster in a variety of ways.

The fragile state

The fragility of the state during the period when 8-4-4 was conceived and implemented can be noted in variety of ways. There was growing unemployment and economic stagnation, and more complaints about this state of affairs were being voiced in the media all the time. It should be noted that the media enjoyed only limited freedom and so the criticism was never overt, and never towards the President. Nevertheless, it was present. Among the long-standing grievances were that the rural regions were economically disadvantaged, the education system was academic and elitist, and there were too few education opportunities in general. For example, 175,000 1986 primary students could not find Form I places. The perception in the media and elsewhere was that the students were being unfairly denied a place they had earned.

Compounding the pressure on the state was the fact that after the initial widening of educational opportunities in the 1960s and 1970s, little further social equity had been achieved. The natural migration to urban areas in search of jobs in times of economic distress was also bringing greater crime and the degeneration of traditional living. The government had attempted to deflect these grievances earlier through the abolition of primary school fees in 1974, and later by partial salary support for Harambee schools. The net effect was negative, however, since other fees rose and the regional disparities worsened. The KANU party and Moi himself became increasingly repressive in the early 1980s, and several opposition politicians were murdered. The Kenyan economy was sluggish at best with low GDP growth, currency instability, falling wages, and rising prices.[20] A new form of legitimacy was needed by the state, and it was not about to turn to elections to get it.

The direct impetus for 8-4-4 was in fact an attempt to broaden educational opportunity through the creation of a second university. This was the original mandate of the Presidential Working Party. With its emphasis on practical and vocational skills the 8-4-4 program had the additional advantage of apparently improving the value of a student's education. Now each student could find or create work in the rural areas. Furthermore, there was another year of primary schooling offered and the number of secondary school exam subjects was increased to ten. This new focus on practical subjects also had the marketing advantage of appearing to reject the overly academic emphasis of the O level program inherited from the colonial era. Therefore it was anti-colonial and even nationalistic in character. By 1993 there was not just one more university but three. As the world systems perspective suggests, in times of political turbulence the state resorts to increased educational opportunity as it strives to maintain its legitimacy.

The fragility of the state can be seen in the fact that at several points over the course of 8-4-4 the office of the President has had to intervene in matters that normally would be the purview of the Ministry of Education. The very initiation of 8-4-4 was by an abrupt Presidential mandate which flew in the face of the recommendations of the Presidential Working Party, and in the face of fiscal realities. The poor exam results of 1990 provoked a strong reaction and the Minister was forced to announce a review. Later in the same year the President again intervened to announce that 3,500 qualified students who had been denied places would be accommodated somehow. The next year another arbitrary intervention occurred when University entrants were reduced from 21,000 to 10,000. In 1993 Form I places were also reduced and school fees were raised amid great commotion. The authorities were seemingly caught between its promises of greater opportunity, especially for those who had *meritocratically* earned places, and economic reality.

The continued fragility of the state can be seen throughout the history of 8-4-4.Most recently it was an election issue during which KANU's opponents attempted take advantage of general discontent and failed expectations for 8-4-4. They vowed to return to the 7-6-3 system, perhaps an appeal to traditionalism. The election itself was a direct

result of threats by the IMF and other foreign donors to cut off aid and not any self-induced flowering of democracy. At a recent curriculum conference in Kenya the criticism of 8-4-4 became more intense, with several academics admitting that it was severely flawed and poorly implemented. More significantly there was the revelation that critics have been silenced for many years as the government equated criticism with sabotage. The media in Kenya now regularly call for extensive evaluation and modification of 8-4-4. Meanwhile whoever can afford it is fleeing the regular system for elite private schools.

Decoupling

The primary tactic of 'decoupling' the state employs is to call for self-sufficiency and meritocratic behaviour. Many educational institutions are being asked to run their organizations in a productive, businesslike manner either through fund-raising or agricultural activities or through raising the fees of users. The Universities have often been closed as a result of the student unrest stemming from these policies. The government has also tried to use an appeal to traditionalism by claiming students have forgotten the hard-working, rural roots of their forebears. It has emphasized that hard working students will succeed. Much attention is therefore given to the highest scoring schools; the nation-wide ranking of schools and districts is published yearly under such headlines as "An Easy Time for the Well Prepared".

In a related development the government has also gone to some effort to label schools as non-political institutions, and threatened to sack any political activist in them. It has done this rather clumsily though, and been forced to admit that by political activist it means anyone from the opposition. Recently the Minister of Education ordered headmasters to enforce the KANU manifesto to the letter. It is a typical decoupling action because it seeks to identify the activities at school with the progress of the nation, even though it is obvious the state is trying to portray itself as the nation. The lines between the state as rightful but neutral administrator and as a chosen (or natural or elected) embodiment of the nation's progress become blurred. The use of the meritocratic theme is therefore quite apt because the ruling elites

can be seen as rightfully doing their part while in fact improving their relative advantages. As President Moi said "differences in skills, efforts, and initiative need to be recognized and rewarded".[21]

The modernity myth

By embarking on a program that signalled an improved economic picture through better vocational and education programs, the state was using the modernity myth in its simplest form. The 8-4-4 program was explicitly aimed at practical education for employment in rural areas to allow them to enjoy the fruits of a modern economy. It was to be relevant to Kenya's industrial and commercial development. It was to address regional disparities, long a source of complaint, by giving a whole extra year of education with a vocational flavour. From a symbolic point of view the time frame for the changes to be felt (tripling of the training capacity by the year 2000) was sufficiently long term to be plausible, yet beyond criticism. 'You can't do these things overnight' is the idea. Such was the power of this myth that it became fashionable for teachers to teach and drill only the theoretical portions of practical subjects. This was also because they often lacked the equipment or training to do the practical portions. The state was in essence saying that jobs do exist for you if you can master the appropriate, and additional, technical and scientific knowledge. The additional subjects under 8-4-4 were to be science and technology. It is these areas that hold the most mythic potency in terms of perceived knowledge. Their effects can be the most dramatic, considering the spectacle of modern machines like computers and planes, and greatly enhanced agriculture and health care.

The other useful feature of science for the modernity myth is that science has a gloss of objectivity and de-mystification. Through diligent use of the scientific method it is possible to understand many things and make greater use of existing resources. This requires discipline, a theme which the state has made use of under the headings of 'merit and self-sufficiency'.

International influences

In terms of international influences, it is not surprising that under the chairmanship of a Canadian academic the new system closely resembled the modern North American model. It had the same number of years at each level and the curriculum contained similar vocational subjects. Without question the economic necessities of the

expansion that 8-4-4 has entailed have forced the state to seek foreign aid. A good example is the $55 million proposal to the World Bank for university revitalization. The World Bank will not simply hand over such a sum without substantial controls and the involvement of World Bank personnel. There may have been a need for expanded higher education facilities in Kenya but the 8-4-4 restructuring has created a greater demand for it. The extra year of primary schooling has undoubtedly increased the number of students who eventually qualify, and the recent loosening of subject requirements will do so as well. Hence the state is forced by this expansion to open the door to more Western influences.

Contradiction: short term responses and long term crisis

The style of the Kenyan state's response to crisis has always been one of reluctance and hostility, a further testament to its fragility. This is exemplified by the government's effort to distance itself partially from the 8-4-4 program by delegating the tasks of curriculum development and other implementation activities to the KIE. This has left it prey to the accusation that there can be no objective evaluation of 8-4-4 by the KIE which is closely tied to the government. Criticism has not been well received and key groups such as university administrators and teachers have not been consulted, despite government claims that they have been all along. The state has engaged only in a facade of consultation with such groups as KNUT, the KIE, and Faculties of Education.

However, the accusations of insufficient funding for scientific and vocational subjects, which form the central thrust of the 8-4-4 practical education, have finally appeared to have an effect: these subjects are being dropped. Schools may now opt out of some required examinable subjects and the exam format has been altered to closely resemble the O level system it replaced. Ironically, while the original 8-4-4 program was in place, the elite schools, which had the necessary equipment and qualified teachers already, actually improved their relative results. The academic achievement disparities thereby worsened, aside from a few exceptional cases. The heavy subject load on students has also been reduced but this has also been accompanied by suggestions that standards are dropping. The list of subjects from which schools may

now replace the practical subjects is quite revealing. It includes French, German, Music, Accounting, Commerce, Arabic and Office Practice. It is quite likely that the elite urban schools will have much less difficulty finding teachers for these subjects than will rural schools. It seems that whenever a highly competitive exam system is in place, a natural elite emerges that resists changes to the system that selected it. The state is therefore loathe, as it has been in this case, to offend this politically and economically influential group. However, this runs against the notion of nurturing interdependencies. Ultimately the state will face another crisis based on the fact that it only appeared to have expanded educational opportunities when in fact it has skewed those opportunities toward certain groups.

The state may have had partial success in its efforts to gain legitimacy. Despite evidence that education under the 8-4-4 program was not actually improving, interest in schooling continues to deepen. A study by Mwira of Harambee schools, which have among the worst records of academic success, showed that parents more than ever want to enrol their children. These parents believe that the examinations are fair and that education is the only road to improvement. In the words of one parent: "The highly educated are cleverer and work better than those with less education. Only the highly educated people can help us."[22] Lauglo and Närman found in their study of the status of practical subjects among Kenyan students and parents that the subjects in fact are popular. Enrolment in them is seen to give a labour market advantage. This perception is faulty because presently the chances of getting a job in these areas is more dependent on personal contacts than educational credentials. It seems that the 8-4-4 program has managed to project a myth of technical training and nation-building that is quite at odds with economic realities.

Despite attempting to reform schooling as a means of enhancing its legitimacy, the history of the 8-4-4 program suggests that in the long term these efforts have not been highly effective in legitimizing the state. One of the most vocal groups of late has been parents who have demanded the resignations of apparently corrupt and incompetent headmasters and teachers. The teachers' associations have also been conducting a low-level campaign of criticism against the 8-4-4 program.

They have been joined by rural groups who are bitter about having to build classrooms which have little equipment and unqualified teachers. Other dissatisfied groups have included the business elite who are so vulnerable to international economic forces, local politicians who are often left with school fund-raising tasks, academia with its critical voice and systemic disruptions (e.g. two streams of students simultaneously), traditional groups concerned about rural social decline and relative ethnic power, teacher groups who feel apathetic and under-supported, students and parents who demand greater economic power through education, social interest groups who demand greater equity, and the government bureaucracy itself which struggles with budget cutbacks. The fragile state in Kenya has had the task of nurturing interdependencies among these groups to signal, in name at least, their collective movement towards an enhanced, modern nation. In fact, the state needs this interdependency to bolster its own legitimacy. With the 8-4-4 program, the state has in the long run antagonized many of them, and now faces an even greater crisis.

Summary

The 8-4-4 program is a good illustrative case when viewed from the world systems perspective. The state found itself in a precarious political position and earlier educational reforms had failed to still the discontent. Under the theme of greatly expanded practical and scientific education, it sought to shore up its own legitimacy. It attempted to partially decouple itself from the program by emphasizing merit and self-sufficiency. Over time the demand for schooling increased, nurtured by signals of modernity which the 8-4-4 system was meant to bring about. Another crisis of legitimacy is now at hand as the concurrent economic recession deepens and the state tries to expand schooling further. It faces criticism from many quarters and is forced to appeal for Western aid, and to accept the influences that will come with it.

4.7 Case 3: The ZIMFEP Schools Program

The ZIMFEP schools program is a good example of the pervasiveness and eventual predominance of Western models of education from the world capitalist system. The fragile state in this case did initially try to signal a transformation of society through an educational reform, a transformation that particularly appealed to some influential groups, namely ex-combatants and some political ideologues. However, over time this educational reform lost its potency in legitimizing the state. The ZIMFEP schools were structured along Western lines and they eventually became simply another extension of educational opportunities parallel to the concurrent massive expansion of Zimbabwe's school system.

The fragile state

The fragility of the Zimbabwean state at independence was much greater than that of many other emerging nations such as Kenya. Expectations and anxieties were very high among many groups. The brutality of the war, the lack of political precedents for post white-supremacist rule, the strong socialist rhetoric of the government, regional instability and the fragility of a relatively good economy, all contributed to a tense atmosphere. Clearly the state had important political debts to pay, and reforms in several areas such as health care and land distribution were badly needed. At the same time, as has been well documented, the actual policies of the government tended to be non-interventionist and capitalist. Hence a contradiction in the political economy of Zimbabwe existed right from the beginning.

The mix of political interests that the state faced was very complex. Following the world systems perspective then, it comes as no surprise that the massive expansion of the education system occurred, and along Western lines. It is a paradox of such expansions, with their implicit broadening and deepening of opportunity, that they substantially copy the previous system. If most Africans were denied a high level academic education before, they should get it now. Why should they be content with some new version of education that is somehow a dilution of the quality of the previous one? But the contradiction in the Zimbabwean political economy required at least some educational

model that addressed the rhetorically expressed goal of societal transformation. This is where the ZIMFEP schools emerged as significant.

Unfortunately for the purposes of legitimation, the ZIMFEP schools had a serious flaw, in that they were not really different from other schools. In fact they became very similar to most other schools in Zimbabwe, with the Cambridge exam system and the usual shortages of equipment, texts, and teachers. The function of ZIMFEP curriculum development was marginalized and eventually stagnated. The mandating of EWP for all schools in the country was related to the ZIMFEP experiences in name only, and it was enforced only in a superficial way. By continuing to use the Cambridge exam in the ZIMFEP schools, with all the international texts and pedagogy that go with it, the state validated the global knowledge system and gave up creation of an alternative one. This was in complete contradiction to the stated aims of the ZIMFEP program such the development of localized systems of co-operation between the school and the community.

Decoupling

With ZIMFEP's radical approach the state went to some extent to decouple itself from the program, yet maintain a link to it for legitimacy purposes. For example, it was very frequently mentioned in statements on education. The decoupling of the ZIMFEP schools was accomplished through the use of the independent ZIMFEP organization with its networks to the expatriate-dominated co-operative movement. ZIMFEP also had good relationships with foreign donors and expatriate expertise which could allow the government to distance itself from support responsibilities. At a theoretical level the schools were also self-governing, and perhaps even models of revolutionary democracy. This further allowed a myth of decentralization, and thereby decoupling, to flourish. In fact the schools were highly dependent on state financial support. For example, one of the major complaints, aside from the material shortages affecting classroom activities, was the lack of vehicles for transport and production work. This seriously handicapped the EWP programs, but the fact that the state appeared to ignore the problems indicates the low legitimacy value ZIMFEP had for the state in the long term.

The connections to the Ministry Curriculum Unit did not result in any new syllabus from ZIMFEP, and the current policy does not include any plans for a re-examination of curriculum aims, methods, or implementation. Several commentators have noted that within the Ministry itself there are varying viewpoints on the viability of ZIMFEP. The government does not seem to have the political will to resolve this obvious impediment to program implementation.[23]

Modernity mythology

ZIMFEP schools offered a double value in terms of legitimating the state. Firstly, they were an extension of the school system in general, and included a potentially marginalized group, ex-combatants and their families who had been in exile. Secondly, they held forth the promise of a transformation of society along the lines of scientific socialism. The vision was of an equitable socialist society as close to perfection as physical and intellectual labour could make it. In fact this was another form of the modernity myth at work. According to the state, ZIMFEP promised the benefits of the most modern and seemingly progressive political system based on the fruits of traditional labour multiplied by the most advanced and powerful social theory. It also was diametrically opposite to the colonial system of capitalism which was so unjust and ultimately unsuccessful, at least in the eyes of those who overthrew it. ZIMFEP was a exciting experiment conducted while a regular Western system was also rapidly expanded. The state had covered itself well.

The expansion of the national school system was indicative of the power of the modernity myth at work and the political dangers that go with its use. With the lure of participation in a modern economy and transnational culture, parents and students ignored the rationally low chances of passing difficult exams or getting a job if passes were achieved. This dynamic had a strong effect on ZIMFEP students who, like their counterparts in regular schools, had little or no interest in practical or vocational subjects. They also sought the status and economic advancement that academic knowledge would apparently bring despite being socialized by ZIMFEP towards very different ends. As an illustration of this point, Chivore found that nearly 70% aspired either to higher education (A levels) or professional training.[24] This

represents an easily understood desire to participate in the modern world of higher knowledge and middle class economic power. It is significant that one of the stigmas that the ZIMFEP program had to overcome was its apparent similarity to the F2 vocational schools of the Rhodesian era. Not only were these schools seen as racist, but they also had associations of manual work and ruralism. Most young Zimbabweans seem to identify with values in the modern urban world, not the traditional rural life.

International influences

In terms of being influenced by the world capitalist system ZIMFEP has actually pursued fairly mainstream economics. The schools have been described for example, as production units. The fact is that the reality of Zimbabwean socialism has been rather hollow. It has never strayed too far from state capitalism. Illustrations are not difficult to find. The government has opted for joint ownership and parastatal control instead of large-scale intervention in the economy. For example, it bought only 45% of the transnational Heinz corporation in 1985.[25] Between 1981 and 1985 the long-term government loans to parastatals rose from $39 million to $161 million. This may have been driven more by fear of foreign ownership than by socialist considerations.[26]

In considering the context of this reform it is important to keep in mind Zimbabwe's actual policies, for they help explain the lack of expansion of ZIMFEP. Several commentators have noted Zimbabwe's preference for leaving the existing economic and social structures generally intact. Stoneman and Cliffe sum up their detailed study of Zimbabwean socialism saying, "there has been precious little attempt so far to transform the socio-economic structure or to change the terms of the country's involvement with the world economy, in directions that would suggest a transition to socialism..."[27] Jansen (1990) adds that, "it is...safe to assume that this decade will completely pass with Zimbabwe retaining a capitalist economy."[28] Dzimbo reported that the government's decision to leave in place high-fee elite schools and retain externally administered exams has undermined all efforts to democratize schooling. He called it, "ill-suited for the building of a socialist society."[29] As a further indication of its resolve the

government passed a Bill in 1986 banning the right to strike of essential workers.[30]

The fact that the economy is not being managed along socialist lines while the state maintains the fiction that Zimbabwe has Marxist-Leninist ideology is bound to create a political crisis in the long term. The expansion of the regular school system outside of ZIMFEP will not be sufficient to maintain the state's legitimacy. After thirteen years of independence the economy is hard put to absorb even a sixth of the graduates now issuing from Zimbabwean schools. The fall of the European communist bloc and economic recession have both created serious problems for the Zimbabwean state. For example, it gave up its notions of a one-party state and was forced to tolerate opposition parties in the 1990 elections. Presently it is searching for legitimacy by considering the forced expropriation (without compensation) of Europeans' farms to give redress to the wrongs of colonialism. Such radical moves indicate a fragile state in crisis.

Short term appeasement and long term crisis

The state therefore seems to have washed its hands of ZIMFEP, at least as far as using it as a national development program. Over time the role of the ZIMFEP schools has changed from 'socialist mini-states' to production units aimed at self-sufficiency. The absence of in-service training for ZIMFEP teachers, and the reliance on expatriate teachers, further reinforces the conclusion that the ZIMFEP has drifted completely into the world system arena. A study has shown that ZIMFEP teachers are not even generally conversant with scientific socialism, but little has been done about it. The fact that the program has never expanded beyond its pilot stage may signify a new strategy of the state to sustain legitimacy. The state can now argue that it has programs underway, but intervening variables beyond its control have side-tracked them. Socialism as defined by the Zimbabwean context will apparently take time. The experience of the state with another socialist curriculum, the Political Economy of Zimbabwe syllabus, was a very negative one. It was met with a barrage of criticism and then withdrawn, which gives a good indication of the fragility of the Zimbabwean state, and of the power of

the forces of the world system. The safest plan now seems to be to keep ZIMFEP programs alive, but marginalized.

Summary

From a world systems perspective, global patterns of schooling have come to predominate in Zimbabwe. The ZIMFEP schools have lost their power to signal a broadening of educational opportunity and a transformation of society because they still participate in the same system as other Zimbabwean schools and are under- supported. As well, the capitalist nature of the economic structures demonstrates the emptiness of the rhetoric of the curriculum. Therefore the value to the fragile state of the ZIMFEP schools is low and they have been marginalized. Recent events in Zimbabwe such as cabinet level corruption scandals, student unrest, repression of opposition politicians, and the drought may force a crisis of legitimacy on the state. The announcement of uncompensated expropriation of white farmers' land may bring this to a head. The transformation of society that was to be led by the programs like ZIMFEP did not occur. Given the present economic constraints, world systems theory predicts that the state might try, for legitimacy purposes, to revive it as a new form of educational expansion.

4.8 Case 4: The ZINTEC Program

The ZINTEC reform presents an interesting case from the world systems perspective. In a simplistic analysis it could be seen as a part of an irresistible expansion of schooling that would occur subsequent to the removal of a racist regime that denied such opportunities. At a deeper level of analysis it can be seen as a source of great legitimacy for the state because of the way it was done. There were several other options available but the state chose this one. ZINTEC has accelerated the demand for schooling and amplified the signals of modernity associated with education. It has acted as an effective conduit for Western culture and educational ideas. The WS perspective makes certain predictions about how the contradictions in a rapid expansion of schooling will unfold and ultimately provoke another crisis of

legitimacy. This crisis is also associated with economic constraint. The ZINTEC case appears to fit these patterns very closely.

The fragile state

The fragility of the Zimbabwean state at independence was great. (See also the previous discussion of this in the ZIMFEP case.) The high expectation for increased educational opportunity put great pressure on the state, as did unresolved political disputes related to tribal alignments during the liberation struggle. A large portion of the highly skilled, wealthy, white population was on the verge of emigrating. Dramatic action was needed to reconcile these and many other political interests. As expected, an ambitious expansion of the school system was embarked upon. It was very wide -ranging because it had so many groups to nurture interdependency. Therefore a careful but steady Africanization of former white elite schools was undertaken, as well the provision of day schools in rural areas and urban townships. Further, state support was extended to mission schools because church groups were key political actors in the liberation struggle, but also sharp critics of government policy afterwards. The ZINTEC program is directly connected to this expansion of the school system.

Firstly, ZINTEC received wide support from many Western organizations such as UNESCO, the British Council, USAID, and WUSC. These organizations lent power to the signals of the modernity myth. Soon many expatriates were involved in the training programs and their expertise quickly accrued high status. There was an echo of this prestige of Western training in the hundreds of expatriate classroom teachers who were soon teaching throughout Zimbabwe. Since the Cambridge certificate system was retained from the previous regime, the basic message was clearly that Western style schooling was the route to national development. Secondly, the option the state chose with ZINTEC was also significant. There were existing teachers colleges whose programs could have been vastly enlarged or new colleges could have been built. There were also possibilities for foreign training for some teachers. (This option was pursued in 1986 with 1200 teachers going to Cuba. This could be interpreted as a gesture of ideological solidarity.)

However, on a dual rationale of cost-saving and ideology (theory and practice closely related, plus local political development), the ZINTEC program was selected. It ignored the foreseeable implementation difficulties and other costs which were shortly to follow. This was because it allowed a *centralized* nation-wide system to be installed. It provided a useful vehicle to signal mass education under central control as is predicted by the world systems perspective for a fragile state. As ZINTEC has evolved, the standardization of its programs has become more marked. The distance education model has become the norm with an organization devoted specifically to producing standard units and harmonizing teacher training throughout the country.

Here we see the first of the contradictions the fragile state faces in the provision of mass education. Since in its pursuit of legitimacy the state must nurture institutional interdependencies, the necessary use of centralized control risks hurting the central actor's authority. Individual preferences and traditional roles come into conflict with the bureaucratic forms which in turn can provoke another crisis. There is plenty of evidence of this in the implementation of ZINTEC. Many of the key actors in the teacher training system were very resistant to the program, as were some at the university, yet ironically their expertise was badly needed. The workload increased dramatically and support such as budgets, equipment, personnel, and management capacity were quickly eroded. There have been several territorial disputes concerning whose responsibilities for certification lay where. The actual format of the ZINTEC program has changed several times from three-year to four-year and back again with a variety of practice teaching stints. This reflects the fragile state's ongoing navigation of a turbulent political environment as different actors had to be accommodated at different times.

As demand for schooling grew, fed by the state, the principle of expansion above all became dominant. Despite the fact that by the early 1990s there was clearly an economic crisis looming, stemming from the inability of the economy to absorb secondary school graduates, the expansion continued. This flew in the face of severe fiscal problems and, more importantly, ZINTEC's explicit curricular model. The whole ZINTEC system of on-the-job training was keyed into professional

collegiality. Established teaching professionals were to supervise and encourage student teachers. In day-to-day terms this rarely occurred at acceptable levels. Student teachers were very inadequately supervised. Their workload was excessive. Much of their energy was expended in maintaining a detailed day book and in completing assignments sent from the college. When a trainer did arrive these were usually given a cursory glance and little useful feedback based on classroom performance was given. The trainer had four or five other schools to visit that day. Student teachers also were treated as very low status by their colleagues and their pay was very often late. These problems are an indication of the weaknesses of the centralized bureaucratic model the state chose, but also its growing need for legitimacy through expansion. The results of these choices will ultimately provoke another crisis.

Evidence of this crisis can already be seen in one key area. Teaching as a career is rapidly declining in popularity. Several studies of teaching as a career have shown that, rather than leading to more teachers with a socialist orientation, a stated goal of ZINTEC, many qualified teachers are leaving the profession. (This is also occurring at the college level as private industry lures away many trainers.) In fact, surveys have shown that students aspire to higher education i.e. **A** levels, or work in other areas rather than teaching. Very often the lesser qualified **O** level graduates are the ones who eventually enter teaching. The teachers themselves cite low wages, poor working conditions, and inadequate professional support as the main reasons they would leave the profession. For many student teachers the main question in mind during their training is how rural or isolated they will be when they graduate and are placed. The rural schools are notoriously ill-equipped and poorly administrated. The fact is that the proportion of qualified teachers has increased and the inequities of the education system have not really improved. The mass opportunity that should flow from the rapid expansion of schools has not occurred. The teacher training system that was to provide large numbers of qualified teachers has only reinforced the mythic signals of modernization, but not effected any real change. The net effect is that the school system is becoming less able to effect real social and political change, and hence

a crisis of legitimacy looms for the state. The documented decline in the quality of teachers will only hasten it.[31]

Decoupling

The state's technique for decoupling was a fairly simple one with ZINTEC. Many teachers colleges were independent institutions to begin with, as was the Associate College Centre connected to the university. Therefore a natural distance existed between the state and the teacher training programs already. With the creation of the National Centre for Distance Education, the state was able to dissociate itself even further even though the Centre was directly answerable to the Ministry of Education. In recent years, as the shortages of qualified teachers in rural areas have intensified, the state has had to design special programs for upgrading. These are clearly under the purview of the Ministry of Education and therefore connected to the state. One great advantage of ZINTEC for the purposes of decoupling, however, is the fact that most of the training takes place at schools run by a variety of groups, not only by the state. Therefore the emphasis can remain on the expansion and improvement of educational opportunity as mediated by many actors, not solely the state.

Modernity myth

The rapid expansion of the school system after a country achieves independence from colonial rule is quite normal. It is a simple attempt to allow participation in the privileged world of economic power and modern knowledge which the general population has only enjoyed vicariously. ZINTEC fits quite directly into this pattern, but with an added political twist. Much political energy was expended on development of a modern socialist state in Zimbabwe, and the basic principles of ZINTEC, namely combining theory and practice with community participation, harmonized well with this political thrust. It was a centrally administered program with progressive methods such as distance education and experiential learning. One of the goals of ZINTEC was that the student teachers promote a socialist world view.

The implication was that the government was not about to allow regional inequalities, or the proliferation of special interest groups. Rather, the state was making a practical effort to establish a fairly good, modern education for everybody. There was no attempt to radically modify the establish curriculum of the Cambridge exams. The only thing

needed was give as many citizens the chance at a modern education, and it would serve them as well as it had the whites. ZINTEC was by definition an assertion of the benefits of modern knowledge.

International influences

The international influences on the ZINTEC program are not difficult to find. Not only, as has been asserted above, did ZINTEC perpetuate the dominance of Western style schooling, it became a conduit for foreign pedagogical ideas. The early supporters of the ZINTEC concept were organizations such as UNESCO, USAID, WUSC and the British Council. There was a great demand for teacher trainers, and ex-patriates filled many of the places. It is no accident that the long work terms of the ZINTEC program are very similar to the trends in education in the West in such areas as co-operative education, and long practicums in Bachelor of Education programs.

Contradictions and the long term crisis

Teachers are naturally concerned about their own individual welfare because they have experienced a lot of low status within a large bureaucratic system. But their experience is emblematic of the broken promises of expanded schooling. The problems in the system seriously handicap the state's signalled ability to provide a quality education and the opportunities that should go with it. It is a result of the Zimbabwean preference, well-established with the distance education model of ZINTEC, for delivering curricula from central bureaucracies without consideration for those who must use it. The world system perspective predicts this development. The state's ability to actually deliver on promises of mass opportunity is always limited, but it degrades over time due to such internal contradictions. The shortages in texts, equipment, personnel, and management capacity in the ZINTEC program have been documented elsewhere. The state may now have to seek further foreign aid as it did at the outset of ZINTEC, and this will further open the door to Western influences. A likely point of contact is the teacher and management training area where many expatriates are already working and where overseas study is probably required.

The real consequences of the rapid expansion of schooling in the absence of commensurate economic growth are now being keenly felt in Zimbabwe. Thousands of graduates face unemployment and stiff competition for tertiary education places. The inequities of the colonial system are still in place to a large extent. The urban and former elite schools still enjoy a large relative advantage over the rural schools. The fact that the state has chosen to continue with the textbook-driven[32] Cambridge exam system, with its Western academic values orientation and control of higher knowledge, will eventually be among the primary causes of political unrest. The ZINTEC program is not only an integral support for this system, but it has served to worsen the effects of social stratification in the country. As has been suggested above, the efficacy of schooling to promote social change has at best plateaued and may be declining. ZINTEC, with its centralized bureaucratic system, is unable to respond to the real needs of teachers or their local conditions, which in turn lowers educational quality. The government has responded with specialized programs for unqualified teachers and is contemplating some school leaver and subsidized employment schemes.[33] However these solutions offer costly short-term relief while the basic political economy of Zimbabwean schooling remains the same.

Summary

The world system perspective illuminates several important patterns in the case of ZINTEC. The centralization and harmonization of national standards during educational expansion highlight a paradoxical attempt to gain legitimacy by the fragile state. It centralizes authority, which in the long term undermines its capacity to meet heightened expectations. The attraction and quality of teaching have both declined which throws into question the state's ability to expand and deepen educational opportunity. Economic factors have conspired with these developments to hasten the crisis. As a result, very few of the higher level goals of ZINTEC, such as creating an education system that integrates theory and productive activities, or promoting a socialist world-view, have even been slightly addressed.

4.9 Notes for Chapter Four

[1] As quoted by Lilis 1985a p. 154
[2] Lillis 1985a p. 150-1
[3] Lillis 1985a p. 152
[4] Lillis (1982) provides an interesting review of this concept. He suggest (after House) that during the technological era during which SMEA was developed, there was a strong belief in objective reality and scientific truth which was independent of culture. p. 2-3
[5] See Table 8.2 p. 150 for a summary of diagnostic and implementational variables to assist in the judgements on appropriate organizational change.
[6] Lillis 1985a p. 148
[7] The Daily Nation 20 Feb. 1993
[8] These views and many other critical ones were isued at a curriculum reform conference in Mombasa in April 1993. Daily Nation 24 April 1993
[9] The Daily Nation 13 Feb. 1993
[10] The Daily Nation 1 May 1993
[11] Rondinelli et al p. 50-51
[12] As detailed by Mbiti p.36
[13] Lauglo and Narman p. 241
[14] Chivore 1990 p.211
[15] Rodinelli et al p. 140 Their name for this system was a divisional-matrix structure.
[16] Dorsey et al 1991 p. 168
[17] Dzimbo p. 22
[18] See Nyagura & Reece, Chovore 1986 & 1988, and Zinyama.
[19] Chivore 1986a pp. 34-39
[20] The World Bank p. 292
[21] The 1974 Development Plan as quoted by Mwira p. 364
[22] Mwrira p. 365
[23] Jansen 1990 p. 33 offers a good summary of program limits facing ZIMFEP
[24] Chivore 1990 p. 211
[25] Dzimbo 1991 p. 285
[26] Herbst p. 77
[27] p. 192
[28] p. 33
[29] Dzimbo 1991 p. 288
[30] Sachikonye in Mandaza 1986 as cited by Dzimbe p. 288
[31] Nyagura and Reece 1991 found that poor inservice and other professional constraints were serious problems needing immediate attention.
[32] Nyagura and Reece 1990 pp. 49-50
[33] For a quick overview of the political and economic options open to the government see Mackenzie p. 348-50

Chapter Five

Conclusions

5.0 INTRODUCTION

It should be recalled that this study juxtaposes a descriptive historical analysis with a comparative analysis of two theoretical perspectives. There is no basis for arguing that one perspective elicits more information than the other. Rather, theoretical conclusions are derived from assessments of relationships observed in these educational reforms. Ultimately, the key rationale for analyzing educational reform is to uncover originary causes, both in terms of their introduction and their degrees of success or failure. As discussed earlier, each theoretical perspective differs in its focus on key actors, on the issue of conflict, and on economics and culture. On the basis of the differences in these four areas an evaluation can now be done to assess the merits of each conceptual perspective. Hopefully this information will be of practical use to planners and analysts who implement educational reform or who influence key actors in the process. There is a pressing need for this, considering the troubled history of educational reform in the developing world. Knowledge of the key factors which facilitate and hinder reform should accelerate this advancement.

Two central points emerge in the discussion: the importance of sustained *support,* and the close connection between politics and educational reform.

5.1 EDUCATIONAL REFORM AS A POLITICAL PROCESS

A review of the cases shows there to be some commonalities among them including arbitrary management style and conflicts between important actors. One striking commonality that emerges is that of sustained *support*. In each of the cases the shortfalls in the achievement of goals can be linked to a lack of support from the government for its own programs. The notion of support includes budgets, personnel, facilities, and equipment.

Naturally it can be argued in a simple way that this lack of long term support only reflects the general poverty of governments in the developing world. But why then are programs initiated when limited resources exist to support them? Without doubt the poor administration

of many educational programs contributes to their downfall or decline. The 8-4-4 program is a good example. Such a massive re-structuring in such a short time would tax any bureaucracy to its limits. However, since good administration and management techniques to some extent are products of an organizational culture that must grow over time, and which are not obvious priorities in a time of cutbacks, the question arises as to why administrative inadequacies are so pervasive and even appear to worsen over time. A fundamental answer lies in the economic and political patterns that dominate the developing world. The style of bureaucratic management commonly seen in many African countries is notoriously heavy-handed, and often coupled with a set of constraints associated with a regime's political authority. When a government initiates a policy, but fails to support it over time, the reason stems not only from poor management capacities, but from political obstacles as well.

What this analysis of school reform in Africa suggests is that the state itself is essentially weak. Its energies are diffused in many directions because its survival is threatened from many quarters. Many of these pressures issue from outside the country, such as from labour policy directions from multinationals to funding conditions from the World Bank. Within the nation many groups, from a discontented rural population to disenfranchised ethnic groups and key business lobbies demanding greater market access, all can assail the state. Efforts to change schooling can therefore be related to an impaired political culture characterized by a weak or fragile state. Economic pressures and historical influences, such as neo-colonialism, further weaken the political culture. The expectations of many groups become more extreme over time, and the potential for change in the relative advantages of these groups becomes highly variable. When the state chooses to raise expectations for all groups as it does with school reform proposals, it risks a lot.

The fact that African states in the developing world has great economic limitations placed upon them is also important. Failed reform is very inefficient and wasteful. Money and energy are spent but if the basic goals are not met, or if other systemic or social problems are

created, then both political and economic pressures increase, sometimes dramatically.

The four case studies here contain ample evidence of raised expectations followed by waste, inefficiency and problematic goal achievement. The failure to achieve goals, many of which were specifically goals of social transformation, has in turn led to political crises in Zimbabwe and Kenya. None of these so far is revolutionary in scope, although in Kenya recent ethnic clashes in which government forces may have had a role have really heightened tension. The general pattern in the past has been one of a gradual increase in tension followed by a period of adjustment. What this points to is not episodic improvements in management techniques, but rather political adjustments by the state to ease tension. The fact that this pattern is found in all four case studies, in four different programs, in four different time periods, in two different cultures and ideologies, suggests a uniformity in the political processes which surround the administration of the reforms. This uniform pattern is the one identified by the world systems perspective.

A useful dynamic to illustrate this point is the question of decentralization. Many of the management theorists assert that through appropriate decentralization much more can be achieved than is presently being done. Using Rondinelli's model, most developing countries can be seen to have an unstable environment. As well, these countries usually need and attempt a high level of innovation. The model then contends that decentralized organizations need to be designed to implement most reforms. The cases of SMEA and ZIMFEP illustrate this point well. Both programs contemplated a large scale change in the attitudes and practices of teachers, and both had semi-independent organizations working to that end. However, instead of giving the organizations support and allowing them to develop their new curricula, the government intervened and then ultimately abandoned them. The centralized system was incapable of effecting the desired programs but would not give support to the groups who might have. The fragile state continues to rely on centralized bureaucratic solutions but does not have the resources and political will to use them

The crucial point here is that administrative decentralization must inevitably mean political decentralization if it is to work. Questions arise as to who will control what, and *who perceives the new political arrangement*. The perceived measure of success for a given educational program can be its cost efficiencies or the empowerment of marginalized groups. The perception can vary between those who see a given reform as a valuable and cost-efficient system, and those who see it as a smokescreen for ongoing social and political stratification. Proposals to substantially decentralize generally meet with political resistance because this entails taking away control from the central authorities, which would also include loss of control of political perceptions. To use world systems terms, it would mean taking away the decoupling function whereby the reform can be portrayed as a nation-building program in the hands of many individuals and groups.

The central question about the appropriate implementation for any given reform remains a political one, because it revolves around who controls funding and who will have a voice in the evaluation of a program's success. In many situations the state will be loathe to give over such power. In an impaired political culture, power comes in a variety of forms and combinations. Perhaps as a result of the developing nations' histories (suffering under colonialism, ethnic strife, economic frustration, failed expectations for schooling, elitism, and so on) the potential for new political power combinations always exists. But the key actor, the weak state, is constantly trying to improve its position in a new political arrangement. It is not surprising that the stated goals of many educational reforms are explicitly political, although rarely in an overt partisan way. The state that is too weak or feels too threatened to relinquish power must therefore make use of acts and signals from its political culture to achieve its goals. These gestures might include the use of a strong nation-building bureaucracy and the notions of modernity and individual opportunity. So while decentralization may be the route to better reform, most states are politically incapable of using it. Rondinelli favours an administrative decentralization, but a political one must go hand in hand with it.

Neither the management perspective nor the world systems perspective has greater explanatory power for the cases considered here.

However, while neither is sufficient in itself to explain the outcomes, the world systems perspective highlights more of the key dynamics and originary causes. The usefulness of the world systems view can also be seen in its more universal application. Kenya and Zimbabwe have quite different ideologies and economic structures, but the political behaviour of both states in terms of educational reform is strikingly similar. Both exhibited state fragility and both used mythic signals of modernity to gain legitimacy. The world systems perspective accounts very well for the abrupt administrative styles and contradictory approaches seen in each of the cases. The state tended to address implementation difficulties in a crisis management way that provoked a long term legitimacy problem for itself. So often in the case studies the state can be seen retreating from its stated political goals, or suppressing criticism, or hamhandedly enforcing its administrative dictums.

Clearly the state is sometimes affected by forces beyond its control and it is dependent to a large extent on the effects of the Western culture and capitalism. There is no conspiracy at work here, neither at the highest levels of power nor by certain powerful groups. In fact many of the groups and individuals, even politicians, involved in the reforms had a sincere interest in their successful implementation, and many people worked hard in difficult circumstances to create the new curricula. But the accumulated administrative obstacles, the sum of the political uncertainties, and the appeal of mythic economic opportunity all created a difficult sea to swim in. In the interim in Kenya and Zimbabwe the state has sought the paradoxical legitimacy that more or better schooling could provide. Eventually the contradictions in this course showed themselves and the state has been forced to either abandon or marginalize its program or make drastic changes in it.

5.2 SUMMARY COMPARISONS OF EACH PERSPECTIVE

The Management Perspective:

Strengths

The interpretation of the processes of reform elicited by the management perspective is certainly very useful. The actors in any reform effort are many, and not considering the reality of any one of them can seriously hamper the success of the innovation. Each of the case studies provides examples of individuals or groups who were ignored, or who were forced to create the appearance of conformity. In the long run this resulted in no real progress towards the goals of the reform. Many instances of this problem can be cited, such as the rural teachers in the SMEA program, the University staff in the 8-4-4 program, the teachers in the ZIMFEP schools, and the headmasters and teacher trainers associated with the ZINTEC program. The implementors of these programs made no real effort to consult with these key groups, although the programs were carried on. The essential result has been cynicism and a façade of conformity only.

The management perspective also highlights the importance of the conflicts among key groups. When Rondinelli speaks of an assessment of management capacity, it is partly with the aim of avoiding wasteful conflicts which will force constant revision of programs or procedures. This was the case with both ZINTEC and SMEA where various groups could be seen pitting their preferred version of the program against one another. The management perspective specifies a variety of options which can be used in a given circumstance, and in a particular order. It gives a starting point for planning. For example, it focuses attention on the capacity of the bureaucracy to manage change. With both SMEA and ZINTEC there were crucial gaps in the ability of the institutions to adapt to new constellations of power and resources. Some investment in the administrative technique of management capacity assessment would have yielded great returns. Too often institutions are left to 'just sort it out' without out any guidance as to how to do this. The result is

usually a wasteful territorial fight that consumes resources and marginalizes key personnel.

Another benefit of the management perspective is its consideration of communication systems. The important loss of teacher networks in the SMEA case is a good example. Reformers must consider how new systems and approaches will be received by those who will use them. Therefore it is a good practical first step to assess and improve communications. The most typical style of communication is the coercive command, and as the case studies show, this usually does not have the desired effect in the long run.

The work of Rondinelli and his colleagues is in fact the quintessence of the management viewpoint. Its emphasis on systematic analysis and planning for contingencies provides an excellent principle of action for educational reform. It is often the case that reforms are rushed into place because the need for change is great. A little more planning may well go a long way. The 8-4-4 program is a good illustration. From a management perspective, a delay in implementation of this reform would have allowed a lot of the expertise at the KIE and in the Universities to be used effectively. The fairer examination system which was instituted recently could have been designed at the outset, and the shortages of vocational equipment could have been anticipated and alternatives could have been found.

Since material shortages and fiscal shortfalls seemed to plague all the reforms, it can also be argued that the management perspective provides a realistic view of economic constraint. Reforms usually require support of all kinds and it is better to find alternatives beforehand than to see a program collapse later. By then the cost of changes is higher both economically and in terms of morale. The same can be said about the cultural conflicts that face reformers, particularly in the area of urban-rural cultural conflicts. It is better to find out how certain reforms will be perceived and used by all groups than to cope with misunderstanding later. The decline of SMEA is a good case in point. By the time the program was fully mandated, there was little that could have been done to bring rural teachers on board, and there was no funding available to do so either.

Weaknesses

It is on the point of conflict that the management perspective also shows its limitations. While it does acknowledge the reality of an uncertain political environment, it does not try to show political connections between that environment and the reforms that are proposed. Yet these connections can extensively affect implementation. The implementation strategies of the state are often heavy handed and arbitrary, which is indicative of the complex and divisive political realities of the developing world, and not necessarily of a lack of administrative acumen. The tendency towards centralized control and national standards, seen in all the case studies, reflects the political turbulence that the Kenyan and Zimbabwean governments face in implementing all their policies, not just educational ones. The democratic institutions that channel educational reform in the West, such as boards of trustees and elected parliaments, are much less functional in Africa. Moreover, the political turbulence there is worsened by the pressures of limited economic capacities. Although Rondinelli asks reformers to consider the level of uncertainty in an environment, they do not give it the prominence it deserves. When the management perspective decries the lack of support for reforms, and the failure to decentralize, it omits a critical discussion of the causes of these organizational behaviours. This raises serious doubts about the viability of the main administrative remedy of decentralization that Rondinelli proposes.

The World Systems Perspective:

Strengths

It is in the area of key actors that the world systems perspective differs greatly from the management perspective. Not only does it bring into consideration the effects of key transnational actors such as the World Bank and multinational corporations, its emphasis on the fragile state as a key actor in educational reform has two clear advantages. Firstly, it recognizes the fact that in the developing world the state itself plays a dominant role in many social institutions. It is the only national actor with the political and economic power to do so, yet its

capacity to meet the expectations of the people is usually inadequate. Not only does it sometimes raise the expectations of the people for its own political purposes, but there is little the state can do to stop these expectations from being raised by forces external to itself, primarily those related to the West's massive economic power. The ordinary person in Africa can easily deduce the opportunities that education appears to offer simply by observing the convenience and prestige that it brings in the form of material wealth, and through knowledge of modern culture. This helps to explain why schools such as Harambee and ZIMFEP continue to attract students even while there is little rational expectation that the education received there is likely to either enhance economic opportunities or self-actualization.

Secondly, the world systems perspective attempts to explain why reforms are introduced in the first place, and ultimately why they often become problematic. The timing of a particular reform, as the management perspective points out, can have a great impact upon how readily it achieves its objectives. The world systems perspective allows us to focus on the political context of educational change, and the four case studies provide ample illustration that the timing of reforms was not related to scrupulous planning or pedagogical and ethical impulses. The pattern of reform initiation can be clearly linked to other crises that the key actor, the state, faced. If the state generally waits for a political crisis to prompt educational reform, then it should not be surprising that reform is often rushed into place, and with economic constraints not well considered. The fact is that there are always dramatic economic and political forces tugging at any institution in the developing world. What the world systems view points out, and all four case studies tend to confirm this, is that the state usually resorts to administrative centralization, not decentralization, even when its capacity to actually manage the programs centrally is not great, and may even be declining.

The world systems perspective looks to the originary causes of conflict that motivate the state, and these clearly must include economic and cultural forces outside the state itself. One of the greatest conflicts, which can be observed running along economic class lines, is that of so-called traditional cultures versus Western culture.

The economic and cultural advantages of certain elite classes are too strong to ignore. The eventual dominance of Western style schooling, and the state's rhetorical and financial support of it, can be seen in all four case studies. With SMEA there was extensive sponsorship and eventually a coercive mandate by the state of what was essentially a British curriculum. The 8-4-4 program actually mimicked North American patterns, and was ultimately more academically rigorous than the previous system. The ZIMFEP program was simply a burdensome addition to the Cambridge certificate system, and ZIMFEP has stagnated because of this. The ZINTEC program did not function as well as it was designed to, and accelerated the demand for the Cambridge certificate by promising more and better teaching towards it. Three of these reform efforts came down solidly on the side of intensive Western acculturation. In the case of SMEA the state was unable to resolve the conflict between the Westernized urban school culture and rural school cultures within Kenya. However, if it had had the resources to continue its in-service training, it would have continued to try to do so.

Weaknesses

There are, however, questions that the world systems perspective raises, yet does not address fully. For example, there is the question of exactly how social and political forces produce the patterns of state behaviour that are observed. It is presumed in this study that somewhere near or at the highest levels of state power there are decisions made to use the school system as a source of legitimacy. It is by no means clear how consciously these decisions are taken, or in what way the myth of modernity has affected the decision-makers themselves. Also unclear is the extent to which the fragile state is buffeted by the pressures from the transnational world system. This clearly must vary from nation to nation. The level of self-consciousness of the decision-makers should be considered in the context of mythology and social visions. There is great power in visions of economic and social change, and hence contradictions, paradoxes, and economic limitations within them can be ignored or rationalized by those who are involved with them. The dynamics of this process need further study. Another question that arises with the world systems view is how much weight should be given to

individuals and groups who are charged with implementing a reform, but who are not at the highest levels of state power, and for whom questions of legitimacy are not crucial. Naturally these mid and upper- level bureaucrats must obey their political masters, but how their personal motives and degree of autonomy affect the observed world systems pattern has not been quantified. Finally, there remains the question of the world systems perspective in an applied sense. It is one thing to assert that the pressures of Western culture and global capitalism cause certain political patterns in the developing world, but it is another to show how to profitably use this knowledge.

5.3 Implications for Policy Making

There are important implications from these conclusions for future reformers and educational planners. They might ask if it is necessary to confront all of the political problems of a given state before they implement say, a new exam system or a different math curriculum? The patterns of the world system seem to be deterministic and unavoidable. However, this does not mean there is no variation from locale to locale, nor does it mean all reform efforts are hopeless. That the patterns exist in a broad sense is true, but the specific manifestation of them in each country is highly variable, just as the mix of political interests varies from place to place. The world systems view points to the fragility of the Africa state in the world system and highlights the contradictions it faces. Therefore, efforts to find specialized ways of increasing political stability for the state in the long term should be considered along with educational reforms. It is not surprising that the criticism and reform of the 8-4-4 program occurred only *after* the IMF-coerced elections in Kenya. Of course there is no guarantee of political stability in that country because of the elections, and not too much has changed politically. But a start has been made.

Given that the donor organizations are playing an ever larger role in African countries, there is potential for more educational changes. There must be more awareness of the larger patterns of transnational cultural pressures. The reluctance in the past to become involved in national politics has often been based on the desire to avoid appearing to be intrusive in domestic affairs. Nevertheless, aid organizations and the World Bank have been very important players in national educational reform in the past two decades, and though not overtly imperialistic, they have been major conduits for global trends in educational culture.

There are at least two powerful reasons for this. First, while it may be true that there has been severe cultural dislocation as modern roles and relations have replaced traditional ones, it is also true that the transnational globalization of schooling has happened almost relentlessly. One reason that the fragile state looks to educational reform for legitimacy is that the audience for such overtures is somewhat receptive. Meyer et al (1993) argue for example, it may be that

cultural dislocation and anomie stem more from unequal progress of different sectors and groups within a nation-state rather than overall penetration of educational culture.

Secondly, a point that should be raised concerning the role of large institutions such as the World Bank is that of the funding and control of future research. These institutions not only train scholars, and often sponsor their overseas studies, they are frequently intimately involved in educational planning in developing countries. If the world systems view does in fact describe some key dynamics between politics and educational change then more research should be sponsored in this area. However the traditional institutional response of the World Bank and other aid organizations has been to seek out quantitative data that can be generalized in order to form strategies. This allows easier project evaluation but it can omit a consideration of important political factors such as those identified in these case studies. In other words, as Samoff (1993) has pointed out, the long historical tradition of the World Bank in using technical and administrative experts to make educational decisions may have to change. It should be noted that in every one of the case studies presented there were explicitly political goals. The tendency of aid organizations in the past has been to ignore these, or perhaps treat them as rhetorical window-dressing.

The question arises: since the forces of the world system are so powerful, and planned educational change is very often subverted by the fragile state grasping for legitimacy, what hope is there for real change? The answer partially is that within the midst of many educational reforms there is also a group of people trying to make the best of them, trying to implement the spirit of the goals at least. These individuals may not even know each other, but they are interconnected at one level or another from the classroom to the Ministry to academia to NGOs. Their voices are only heard when the economic and political distress is lessened to some extent; unfortunately this is usually when the fragile state has gained a little credibility. The implication for policy-making then, is to use economic and other incentives to help regenerate the state. This means placing emphasis on the foundations of democracy including respect for human

rights, institutionalization of elections, decentralization of authority, and improvements in social equity.

A cautionary note should be made though, that regardless of whether these foundations are in place the pressure of the world system will be there. The main hope seems to lie in providing strong incentives to the fragile state to hand over the management of planned educational change to those in civil society who need to influence the change for it to be successful. Those individuals and groups, and the process of change which they must administer, have been identified through the lens of the management perspective. At the same time, however, thorough grounding in the political dynamics that the world system perspective illuminates should assist educational planners and economic advisors in making better use of the techniques that the management perspective provides to improve education. The management perspective provides a practical basis for improving reform, and the world systems view provides an excellent macro theoretical perspective for scholarship which in the end must inform ongoing efforts to reform national education systems in Africa.

References

6.0 References

Arnove, R. "The Ford Foundation and the Transfer of Knowledge: Convergence and Divergence in the World-system". Compare Vol. 13. #1. 1983. 7-24.

Adick. C. "Modern Education in 'Non-Western' Societies in the Light of World Systems Approach in Comparative Education" International Review of Education . Vol. 38 # 3 1992. 214-255.

Berg-Schlosser, Dirk Political Stability and Development: A Comparative Analysis of Kenya, Tanzania, and Uganda London 1990.

Bray, M. & Lillis. K. Community Financing of Education Issues and Policy Implications in Less Developed Countries London 1991.

Blakemore, K. & Cooksey, B. A Sociology of Education for Africa London 1980.

Bowser, G. "The New 8-4-4 System: Meeting the Needs of the Vocationally Disadvantaged in Kenya" The Journal Spring 1988, 11-13.

Carnoy, M. "Educational Reform and Planning in the Current Economic Crisis" Prospects Vol. 16 , No. 2, 1986, 212-234.

Chinapah, V. "Educational planning, Administration and Management in Africa" Prospects Vol. 21, #1, 1991, 27-41.

Chung, F. "Policies for Primary and Secondary Education in Zimbabwe" Zimbabwe Journal of Educational Research ,Vol. 1, #1, 1989, 22-42.

Chivore, B."Teacher Education in Zimbabwe: New Strategies, Problems and Possible Solutions" in Treffgarne, C. Education in Zimbabwe University of London 1986a, 28-49.

________" Form IV pupils' Perception of and Attitude Towards the Teaching Profession in Zimbabwe" Comparative Education Vol. 22 # 3, 1986b, 233-253.

________ "Factors Determining the Attractiveness of the Teaching Profession in Zimbabwe" International Review of Education ,Vol. 34, 1988, 59-78.

________"Education with Production in Zimbabwe: an Evaluation of Teachers' and Pupils' Attitudes and Perceptions" International Journal of Lifelong Education ,Vol. 9 #3, 1990, 201-218.

Cohen, J. , Grindle, M., & Walker, T. "Foreign Aid and Conditions Precedent: Political and Bureaucratic Dimensions" World Development, Vol. 13, # 12, 1985, 1211-1230.

Colclough, Christopher "The Higher Education Paradox in African Developing Planning" International Journal for Educational Development,Vol. 9 # 4, 1989, 271-281.

Court, D. "Education as Social Control: the Response to Inequality in Kenya and Tanzania" in Uchendu, V.C. ed. Education and Politics in Tropical Africa New York 1979.

Crossley, M. "Strategies for Curriculum Change and the Question of International Transfer" Journal of Curriculum Studies, Vol. 16, #1, 1984, 75-88.

Dorsey, B. "Educational Development and Reform in Zimbabwe"
Comparative Education Review ,Vol. 33, # 1, 1989,40-58.

_________, Matshazi, M & Nyagura, L. A Review of Education and Training inZimbabwe CIDA Harare 1991.

_________, Jaji, G., Matare, S., Palmer, F. Mid-Term Project Evaluation, Zimbabwe Education AssistanceProject, Phase III (766/15037) draft report CIDA Harare February 1992.

Dzvimbo, K.P. "Teacher Education Reform in Zimbabwe" Interchange ,Vol. 20 # 4, 1989, 16-31.

_________ "Education for Liberation and Devlopment: A Comparison of Cuban and Zimbabwean Eucational Practices" Zimbabwe Journal of Educational Research ,Vol. 3 # 3, 1991, 281-308.

Easton, David "The Function of Formal Education in Political System" The School Review Autumn 1957, 304-316.

Eisemon, T. Benefitting from Basic Education in Kenyan Schools: Quality and Functional Literacy in Kenya London 1988.

_________ "Foreign Training and Foreign Assistance for University Development in Kenya: Too much of a good thing?" International Journal for Educational Development Vol. 6 # 1, 1986, 1-13.

Eshiwani, G. "The Goals of Mathematics Teaching in Africa: a Need for Re-examination" Prospects , Vol. 9, # 3, 1979, 346-351.

Flemming, W. "The School Mathematics Project" in Stenhouse, L. (ed).
Curriculum Researchad Development in Action London 1980, 25-41.

Foster, P. "Some Hard Choices to be Made"
Comparative Education Review ,Vol. 33, # 1, 1989, 105-110.

Fuller, B. Growing up Modern: the Western State in Third World Schools London 1991.

______ "What School Factors Raise Achievement in the Third World" Review of Educational Research,Vol. 57, #3, 1987, 255-292.

Furley, O.W. & Watson, T. A History of Education in East Africa New York 1978.

Gatawa, S. "ZINTEC" in Treffgarne, C. Education in Zimbabwe University of London 1986, 13-25.

Ginsburg, M., Cooper, S., Raghu, R., Zegarra, H. "National and World-System Explanations of Educational Reform" Comparative Education Review Vol. 34 # 4, 1990, 474-499.

Gustaffson, I. "Work as Education--Perspectives on the Role of Work in Current Educational Reform in Zimbabwe" in Lauglo& Lillis Vocationalizing education: an international perspective Oxford 1988, 219-229.

__________, "Diversified Secondary Education in Botswana and Zimbabwe:
Goals and Constrainst of Two Experimantal Porograms" SIDA Education Divsion 1986.

Harber, C. Politics in African Education London: 1989.

______ "Weapon of War: Political Education in Zimbabwe"
Journal of Curriculum Studies ,Vol. 17, # 4, 1985, 163-174.

Herbst, J. "Political Impediments to Economic Rationality: Explaining Zimbabwe's Failure to Refrom its Public Sector" The Journal of Modern African Studies ,Vol. 27 # 1, 1989, 67-84.

Heyneman, S. "The World Economic Crisis and the Quality of Education" Journal of Educational Finance Vol. 15, #1, 1990, 456-469.

Hoy,W.& Miskel, C. Educational Administration: Theory, Research and Practice (4th ed.) New York 1989.

Hodzi, R. "Assessment of Teacher Needs for Implementation of Zimbabwe New O level Syllabus" Zimbabwe Journal of Educational Reseach Vol. 3, # 1, 1991, 377-393.

Irizarry, R. L. "Overeducation and Unemployment in the Third world: The Paradoxes of dependent Industrialization" Comparative Education Review Vol.24, # 3, 1980, 338-352

Jansen, J.D" Curriculum Reconstruction in Post Colonial Africa: Review of the Literature" International Journal of Educational Development ,Vol. 9, # 3, 1989, 219-231.

________ "Curriculum Policy as Compensatory Legitimation? A View from the Periphery" Oxford Review of Education ,Vol. 16, #1, 1990, 29-38.

________"The State and Curriculum in Transition Societies: the Zimbabwean Experience" Comparative Education Review , Vol. 35 # 1, 1991, 81-87.

King, K., "Educational Transfer in Kenya and Tanzania" Compare, Vol. 13, #1, 1983, 83-95.

Knight, J. Education, Productivity, and Inequality: The East African Natural Experiment Washington 1990.

Lewin, Keith "Quality in Question: a new Agenda for Curriculum Reform in Developing Countries" Comparative Education Vol. 21, #2, 1985, 117-133.

Lauglo, J. & Narman, A. "Diversified Secondary Education in Kenya: The Status of Practical Subjects, and Effect on Attitudes and Destinations after School" International Journal for Educational Development ,Vol. 7 # 4, 1987, 227-242.

Lillis, K. "Issues of Relevance in Kenyan Mathematics and Science Curricula" International Journal Of Educational , Vol. 1 # 3, 1982, 1-12.

_________" School Mathematics of East Africa: a Major System Transfer" Compare ,Vol. 15 # 2, 1985a, 141-159.

_________ "Processes of Secondary Curriculum Innovation in Kenya" Comparative Education Review, Vol. 29, # 1, 1985b, 79-98.

_________"Africanizing the School Literature Curriculum in Kenya: A Case Study in Curriculum Dependency" Journal of Curriculum Studies ,Vol. 18, #1, 1986, 63-84.

Maccharia, D. in Dave, R.H., Percra, D.A., and Ouane, A. eds. Learning Strategies for Post Literacy and Continuing Eduaction in Kenya, Nigeria, Tanzania, and the United Kingdom UNESCO Institute for Education, Hamburg 1985.

MacKenzie, C. "Zimbabwe's Educational Miracle and the Problems it has Created" International Review of Education ,Vol. 34, 1988, 338-353.

MacLean, M. "Educational Dependency: a Critique" Compare ,Vol. 13. # 1, 1983, 25-41.

Mbiti, D., "Organization of Productive work in Technical and Vocational Education" Studies in Technicaland Vocational Education UNESCO Kenya 1985.

Merryfield, M. " The Role of Social Studies in African Development: the Significance of Contextual Factors" International Journal of Social Education ,Vol. 4, # 2, 1989, 22-43.

Meyer, J. &Rowan, B. "Instititutionalizing Organizations: Formal Structure as Myth and Ceremony" American Journal of Sociology ,Vol. 83, # 2, 1976, 340-363.

__________"The Effects of Education as an Institution" American Journal of Sociology , Vol. 83, #2, 1976, 55-77.

__________& Hannan, T. eds. " National Development and the World System" in Educational Economic, and Political Change 1950-70 Chicago 1979, 3-16.

________, Nagel, J., & Snyder, C. "The Expansion of Mass Education in Botswana: Local and World Society Perspectives" Comparative Education Review ,Vol. 37 # 4 1993.

Mwira, K. "Kenya's Harmbee Secondary School Movement: The Contradictions of Public Policy" Comparative Education Review ,Vol. 34 # 3, 1990, 350-368.

Nkinyangi, J. "Access to Primary Education in Kenya: The Contradictions of Public Policy" Comparative Education Review ,Vol.26 # 2, 1982, 199-217.

Nziramasanga, C.T. "Social Studies Curriculum Development in Zimbabwe" International Journal of Social Education ,Vol. 4, # 2, 1989, 44-54.

Nyagura, L. & Reece, G. "Teacher Quality in Zimbabwean Secondary Schools" Zimbabwe Journal of Educational Research Vol. 3 # 3, 1991, 213-237.

Nyagura, L. & Reece, G. "Curriculum Implementation in Zimbabwean Secondary Schools" Zimbabwe Journal of Educational Research , Vol. 2 # 1 1990 .

Olembo, J.O. "Financing Education in Kenya" Prospects ,Vol. 16 ,# 3, 1986, 369-375.

Ota, C.C. "Community Financing of Schools in Zimbabwe" Prospects ,Vol. 16, # 3, 1986, 355-368.

Rondinelli,D., Middelton, J., & Verspoor, A. Planning Educational Reforms in Developing Countries London 1989.

Rondinelli, D. "The Dilemma of Development Administration: Complexity and Uncertainty in Control-Oriented Bureaucracies" World Politics ,Vol. 35 # 1, 1982, 43-72.

________ "Decentralization Territorial Power and the State: A Critical Response" Development and Change, Vol. 21 # 3, 1990, 43-72.

Samoff, J. "Decentralization: The Politcs of Interventionism" Development and Change, Vol. 21 # 3, 1990, 94-96.

_____ "The Reconstruction of Schooling in Africa" Comparative Education Review Vol.37 # 2, 1993, 181-222.

Sibanda, Doreen, "In Service Training of Primary School Teachers in Zimbabwe" United Kingdom Overseas Develpoment Fund 1983.

Sifuna, D. "The Quality of Primary Schools and Pupil Achievement in Kenya" Kenya Journal of Education ,Vol. 4, # 2, 1989, 90-125.

_______ "Multilateral Aid" Prospects ,Vol. 8, # 4, 1983, 481-492.

_______ " Prevocational Subjects in Primary Schools in te 8-4-4 Education System in Kenya" International Journal for Educational Development ,Vol. 12 # 2, 1992, 133-145.

_______ " Diversifying the Secondary School Curriculum: the African Experience" Internationl Review of Education ,Vol. 38 #1, 1992, 5-18.

Slater, D. "Debating Decentralization-- a Reply to Rondinelli" Development and Change, Vol. 21 # 3, 1990, 74-93.

Spaulding, Seth, "Prescriptions for Educational Reform: Dilemmas of the Real World" Comparative Education , Vol. 24 # 1, 1988, 5-17.

Stenhouse, L. (ed). Curriculum Research and Development in Action London 1980.

Stoneman, C. & Cliffe, L. Zimbabwe: Politics, Economics and Society London 1989.

van Rensburg, J, "Looking Forward from Serowe" Education with Production February 1984, 85-115.

Zinyama, L. "Career Aspirations of University of Zimbabwe GeographyUndergraduate Students and the Supply of Graduate Geography Teachers" Zimbabwe Journal of Education Vol. 2, # 1 1990, 62-75.

Documents

International Monetary Fund Government Finance StatisticsYearbook Washington 1990.

International Monetary Fund International Financial StatisticsYearbook Washington 1990.

The World Bank Trends in Developing Economies Washington 1992.