

**School Effectiveness and School Change in Developing Countries:
Example Cape Verde**

Inaugural Dissertation
For Fulfilling the requirements of a
Doctor in Philosophy
At the Fakultät Erziehungswissenschaften
Der Technischen Universität Dresden

Submitted by

Rodney Reviere
Maputo, Mozambique

Maputo, 27 February, 2004

Index

LIST OF ABBREVIATIONS	4
INDEX OF CHARTS AND TABLES	6
A NOTE ON TRANSLATIONS	7
A NOTE ON TRANSLATIONS	7
1. INTRODUCTION AND STATEMENT OF THE PROBLEM	8
1.1. BACKGROUND OF THE PROBLEM.....	8
1.1.1. The Setting -- Cape Verde.....	8
1.2. A BRIEF HISTORY OF FORMAL EDUCATION IN CAPE VERDE	12
1.2.1. The Colonial Period.....	12
1.2.2. Education in the Republic of Cape Verde	16
1.2.3. The Cape Verdean School System Today.....	30
1.3. STATEMENT OF THE PROBLEM	33
1.4 SIGNIFICANCE AND RATIONALE OF THE PROBLEM IN ITS BROADER ASPECTS.....	38
1.5. RATIONALE FOR THE STUDY.....	39
1.6. OBJECTIVE AND MAJOR QUESTIONS OF THE STUDY	42
1.6.1. Objective of the Study.....	42
1.6.2. Major Questions of the Study.....	42
1.7. DEFINITIONS OF KEY CONCEPTS	42
1.8. SUMMARY AND BRIEF OVERVIEW OF THE CHAPTERS TO FOLLOW	47
2. REVIEW OF RELATED RESEARCH.....	48
2.1. SCHOOL EFFECTIVENESS IN THE UNITED STATES AND OTHER DEVELOPED COUNTRIES	48
2.2. CRITICISM OF SCHOOL EFFECTIVENESS RESEARCH.....	66
2.3. AFRICA AND THE DEVELOPING WORLD.....	69
2.3.1. Summary of Research in the Developing World.....	96
2.4. CONCLUSIONS FROM THE LITERATURE REVIEW	98
2.5. THEORETICAL FRAMEWORK	102
2.6. SUMMARY OF CHAPTER TWO AND PREVIEW OF CHAPTER THREE	102
3. METHODOLOGY	104
3.1. TECHNIQUES	105
3.2. COLLABORATORS	107
3.3. SAMPLE SELECTION	107
3.3.1. Rationale.....	107
3.3.2. Criteria for Sample Selection.....	107
3.4. DATA GATHERED	108
3.5. RESEARCH DESIGN AND THE MAJOR RESEARCH QUESTIONS.....	108
3.6. DATA ANALYSIS	109

3.7. LIMITATIONS OF THE STUDY	110
4. DATA PRESENTATION AND ANALYSIS	112
4.1. DATA SUMMARY	113
4.1.1. <i>Parent and community support</i>	113
4.1.2. <i>High expectations</i>	117
4.1.3. <i>High learning time</i>	119
4.1.4. <i>Class size</i>	120
4.1.5. <i>Effective leadership/teacher supervision</i>	122
4.1.6. <i>A capable teaching force (educated, trained and experienced)</i>	127
4.1.7. <i>High time-in-school</i>	131
4.1.8. <i>An orderly learning environment</i>	133
4.1.9. <i>Adequate material support</i>	135
4.1.10. <i>Teacher attitude and behavior</i>	137
4.1.11. <i>Homework</i>	139
4.1.12. <i>Frequent assessment/monitoring of student progress</i>	140
4.1.13. <i>Other factors</i>	142
4.1.14. <i>Change factors</i>	147
5. CONCLUSIONS AND RECOMMENDATIONS.....	152
5.1. REFLECTIONS ON THE RESEARCH	159
5.2. RECOMMENDATIONS	159
5.3. SUGGESTIONS FOR FURTHER RESEARCH	160
5.4. SUMMARY	162
APPENDICES.....	163
WORKS CITED	169

LIST OF ABBREVIATIONS

ADB	African Development Bank
ADEA	Association for the Development of Education in Africa
EBC	Ensino Básico Complementar, Supplemental Basic Education
EBE	Ensino Básico Elementar, Elementary Basic Education
EBI	Ensino Básico Integrado, Integrated Basic Education
ES	Ensino Secundário, Secondary Education
FAO	Food and Agriculture Organization of the United Nations
GEDSE	Gabinete de Estudos e Desenvolvimento do Sector Educativo Department of Studies and the Development of the Education Sector
GEP	Gabinete de Estudos e Planeamento, Department of Studies and Planning
ICASE	Instituto Nacional de Acção Social Escolar
IP	Instituto Pedagógico, Pedagogic Institute
ISE	Instituto Superior de Educação, Institute of Higher Education
MECJD	Ministério da Educação, Cultura, Juventude e Desportos, Ministry of Education, Culture, Youth and Sports
MoE	Ministry of Education
MPD	Movimento Para Democracia, Movement for Democracy
OPEC	Organization of Petroleum Exporting Countries
PAICV	Partido Africano da Independência da Cabo Verde, African Party of the Independence of Cape Verde
PAIGC	Partido Africano da Independência da Guiné e Cabo Verde, African Party of the Independence of Guinea and Cape Verde
PREBA	Projecto de Renovação e Extensão do Ensino Básico, Project for the Renovation and Extension of Basic Education
UNCDF	United Nations Capital Development Fund

UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WFP	World Food Program
WHO	World Health Organization

INDEX OF CHARTS AND TABLES

<i>TABLE 1-1: RACE CLASSIFICATION PERCENTAGES DURING THE COLONIAL ERA (FROM LOBBAN 1995, P. 55)</i>	10
<i>CHART 1-1: ELEMENTARY SCHOOL ENROLLMENT DURING THE LATE COLONIAL PERIOD, 1963-1975</i>	15
<i>TABLE 1-2: ENSINO BÁSICO ELEMENTAR HOURS PER WEEK BY SUBJECT</i>	18
<i>TABLE 1-3: ENSINO BÁSICO COMPLEMENTAR HOURS PER WEEK BY SUBJECT</i>	18
<i>CHART 1-2: PERCENTAGE OF TEACHERS WITH SOME FORMAL TRAINING FROM 1986-1998</i>	25
<i>TABLE 1-4: WEEKLY COURSE LOAD FOR ELEMENTARY STUDENTS IN EBI</i>	27
<i>CHART 1-3: TOTAL ELEMENTARY SCHOOL ENROLLMENT FROM 1975 TO 1998</i>	28
<i>TABLE 1-5: COMPARISON OF ELEMENTARY SCHOOLS STATISTICS FOR 1975 AND 1998</i>	29
<i>TABLE 1-6: PROFILE OF SCHOOLS 1998-1999 SCHOOL YEAR</i>	32
<i>TABLE 1-7: STUDENT FAILURE RATES IN SELECTED SKILLS IN PORTUGUESE LANGUAGE</i>	37
<i>TABLE 1-8: STUDENT FAILURE RATES ON THE PORTUGUESE LANGUAGE FINAL EXAM BY GRADE LEVEL</i>	37
<i>TABLE 1-9: STUDENT FAILURE RATES ON SPECIFIC MATHEMATICS SKILLS ON THE FINAL EXAM BY GRADE LEVEL</i>	37
<i>TABLE 2-1 INTERNATIONAL COMPARISON OF SCHOOL EFFECTIVENESS VARIABLES</i>	64
<i>TABLE 2.2: TEDDLIE AND REYNOLD'S COMPARISON OF U.S. AND U.K. STUDIES</i>	65
<i>TABLE 2-3: CRITICISM OF SCHOOL EFFECTIVENESS RESEARCH</i>	66
<i>GRAPHIC 2-1: EFFECTIVE SCHOOLS MODEL FROM SRI LANKA</i>	83
<i>TABLE 2-4: COMPARISON OF STUDIES CONFIRMING EFFECT OF IN-SCHOOL FACTORS</i>	97
<i>TABLE 2 -5: COMPARISON OF FOUR REVIEWS OF THE SCHOOL EFFECTIVENESS LITERATURE</i>	98
<i>TABLE 5.1. DATA SUMMARY TABLE</i>	155
<i>DIAGRAM 5.1: INTERRELATIONSHIP BETWEEN SCHOOL EFFECTIVENESS FACTORS</i>	157

A Note on Translations

Some source documents were in Portuguese, French or German. The author translated all documents and assumes responsibility for any errors.

1. Introduction and Statement of the Problem

Education in Cape Verde has come a long way since its humble colonial beginnings with the opening of the first school in 1525. However, despite notable progress and the existence of some schools which are perceived to be superior, the quality of the education provided in the public school system is poor overall. Unfortunately the dearth of research on education in Cape Verde – and indeed the rest of the developing world – available to guide qualitative improvement forces school officials and change agents to use models from developed countries to guide change efforts. The purpose of this study is to examine the validity of that practice based on experiences accumulated during part of a seven year technical aid intervention.

Chapter one is divided into several sections. Section one describes the setting, beginning with a brief description of Cape Verde’s land, people, native language and economy. This contextual information is followed by a brief history of formal primary education in Cape Verde in section two, concluding in a description of the current educational situation. In section three the problem of poor student performance is then documented and explained in terms of its significance and the need for improvement. The statement of the objective of the study and the major research questions follow in section four. Section five concludes with definition of key terms. The second chapter of the proposal contains a review of relevant literature, both from the United States and other developed countries as well as that focusing on the developing world and presents a basic model of school effectiveness derived from the literature. The third chapter describes the research methodology used. Chapter four presents the analysis of the conceptual framework using the data gathered. The final chapter presents conclusions from the research, including implications for further research and for improving the impact of development interventions in basic education.

1.1. Background of the Problem

1.1.1. The Setting -- Cape Verde

Windswept and rocky, nine inhabited islands 400 miles west of Senegal make up the Republic of Cape Verde. The islands, with a total land area of 4,035 square kilometers, are spread across tens of thousands of square kilometers of open ocean. While “...much of Cape Verde projects an image of starkest aridity, of naked rock hills glowing red under a burning sun” (Ludtke 1989), they do have their own beauty as Charles Darwin (1933) noted in Chapter 1 of

his landmark book *The Voyage of the Beagle*. In the following passage he describes the island of Santiago where the national capital of Praia is located:

The volcanic fires of a past age, and the scorching heat of a tropical sun, have in most places rendered the soil unfit for vegetation.... The island would generally be considered as very uninteresting, but to anyone accustomed only to an English landscape, the novel aspect of an utterly sterile land possesses a grandeur which more vegetation might spoil. A single green leaf can scarcely be discovered over wide tracts of the lava plains; yet flocks of goats, together with a few cows, contrive to exist. It rains very seldom, but during a short portion of the year heavy torrents fall, and immediately afterwards a light vegetation springs out of every crevice. This soon withers; and upon such naturally formed hay the animals live. It had not now rained for an entire year. When the island was discovered, the immediate neighbourhood of Porto Praya was clothed with trees, the reckless destruction of which has caused here, as at St. Helena, and at some of the Canary islands, almost entire sterility. The broad, flat-bottomed valleys, many of which serve during a few days only in the season as water-courses, are clothed with thickets of leafless bushes. Few living creatures inhabit these valleys (p. 1).

Located at 16° north latitude, Cape Verde has a subtropical climate but is much cooler and drier than one would expect. Lobban (1995) says the "...archipelago is better understood as a western extension of the Sahara Desert" (p. 5). Unlike the continental desert, however, temperature does not vary greatly because the islands benefit from the southerly flowing Atlantic current which brings cool water down from the North Atlantic, and there is more rainfall. Nonetheless, the climate, like the land, resembles that of the Sahara and that has played a role in shaping the country and the people.

Many people today have never heard of Cape Verde. Jean Ludtke (1989) points out that the islands' "minuscule land mass, geopolitical anonymity and abysmal poverty make them prime candidates for oblivion" (p. 35). But their historical importance is much greater than their current lowly status. In earlier years, the islands were visited by such famous people as Christopher Columbus in 1498, Amerigo Vespucci in 1499, Francis Drake in 1578 and 1585, and Charles Darwin in 1832.

The islands were uninhabited when discovered by the Portuguese in 1455 or 1456 (Lobban 1995). Settlement began a few years later in 1460 with the settlement of Ribeira Grande on the island of Santiago, then called São Tiago. The Portuguese installed their own feudalistic class structure and based the economy on plantation agriculture. Slaves were brought from the African continent to work on the plantation, and soon Cape Verde became an important way-station for slaves bound for the New World. Cape Verde's key position in the shipping lanes and its important role in the slave trade attracted pirates and corsairs, including raids by Francis Drake in 1578 and 1585.

It did not take long for the minority white population to have sexual relations with the slave population. Within a relatively short time the majority of the population was classified as “mestiço”, or mixed. Table 1-1 shows the racial classification for most of the colonial period.

Table 1-1: Race classification percentages during the colonial era (from Lobban 1995, p. 55)

Year	“White”	“Mestiço”	“Black”
1550	1.96	69.61	28.38
1900	3.19	62.47	34.34
1930	3.98	59.80	36.34
1936	3.89	75.23	20.86
1940	3.19	62.47	34.34
1950	2.06	69.09	28.84

Similar to the mixing of races which created the majority “Mestiço” population, a great mixing of languages took place and produced a Creole language. *Crioulo*, as it is known in Cape Verde, is overwhelmingly Portuguese in its psycholinguistic structure (Lobban 1995, p. 70) albeit simplified – “...verbs are uninflected and nouns are used without regard to gender or number” (Ludtke 1989, p. 47), and it contains some African words. Moreover, “[a]lthough Cape Verdean *Crioulo* derives as much as 90 percent of its vocabulary from archaic Portuguese, it is largely incomprehensible to the modern Portuguese speaker.... In addition, there are internal differences within Cape Verde, i.e., the *Crioulo* spoken in the northern group of (Barlavento) islands bears more resemblance to modern Portuguese than does that spoken in the southern (Sotavento) islands which were settled earlier” (Ludtke 1989, p. 47).

The *Crioulo* language was used in colonial times as a way of enforcing the stratified social system. During the colonial era, “*Crioulo* was defined as a low-status ‘dialect’ not to be used by those with access to formal education, and was thought to be a hindrance to abstract thought and educational progress. Knowledge of Portuguese was a prerequisite for jobs other than

manual labor” (Ludtke 1989, p. 48). Lobban (1995) reports that Crioulo was denigrated and considered merely poorly spoken Portuguese. However, towards the end of the colonial period, Crioulo took on political importance as it became a symbol of Cape Verdean cultural identity, something the colonial government tried to repress. Crioulo was even banned in government buildings in the final years of colonial rule (Ludtke 1989, p. 48). Even today, twenty-nine years after independence, language competence in Portuguese is closely associated with social rank and status and Portuguese remains the official language.

In addition to deprivations caused by pirates and the repressive colonial system, Cape Verde has historically suffered from periodic sustained droughts which frequently caused wide-spread famine. “Statistics from 1747 to 1970 show that there have been 58 years of famine and over 250,000 related deaths in some 12 drought periods” (Lobban 1995, p. 62). “As much as 44% of the entire population was lost during the worst of these droughts. At the turn of the twentieth century, as many as 20,000 to 30,000 Cape Verdeans would die in a given year due to the devastation of the drought” (World Bank 1994a, p. 53). However, the Portuguese motherland did little to aid the people (Bitter 1995). They even took advantage of the hardships in Cape Verde by ‘hiring’ Cape Verdeans to work in brutal, slave-like conditions on plantations in Príncipe and São Tome (Lobban 1995).

Emigration has always been an escape from the hardships of life and the limited economic opportunities in Cape Verde. Bitter (1995) estimates that “approximately 500,000 Cape Verdeans live abroad, primarily in Boston, USA; Lisbon, Portugal; Rotterdam, The Netherlands; as well as in Brazil, France, Germany, Italy and Senegal or on board a ship” (p. 74). Lobban (1995) reports “estimates that between 1970 and 1980, the net emigration corresponded to 15 percent of the population” (p. 59).

The economic situation has improved since independence, particularly as the first government, a left-leaning pan-African party called the PAIGC (Partido Africano da Independência da Guiné e Cabo Verde, the African Party for the Independence of Guinea and Cape Verde) took a sensible path of political non-alignment and was thereby able to benefit from foreign aid from both the capitalist west and communist east (Ludtke 1989). This non-alignment policy continued even after the political break with Guinea Bissau in 1981 under the renamed party PAICV (Partido Africano da Independência da Cabo Verde).

Foreign aid is still important to the development of the country. Grepne (1999) goes even further, arguing that “foreign aid is indispensable to Cape Verde, which receives one of the highest levels of aid per capita in the world (\$US 320 in 1995)” (p. 288). At present, foreign aid includes five projects running in the basic education sector alone. In addition to official aid, Cape Verde receives money from Cape Verdeans living outside of the country. In 1994, the World Bank (1994b, p. 2) estimated that “there are twice as many Cape Verdeans living abroad as are resident in the country, and their remittances account for nearly 20% of GNP [Gross National Product],” whereas in 1998 the figure was 16% (Economist Intelligence Unit 2000). Cape Verdean family connections and obligations are strong, hence the relative generosity of the emigrant populations.

1.2. A Brief History of Formal Education in Cape Verde

1.2.1. The Colonial Period

Cape Verde has a long history of an inadequate education system. Formal education in Cape Verde goes back to the founding of the first school in the original colonial capital of Ribeira Grande in 1525 for children of the colonial masters. Education during the first two centuries of colonial rule can be summed up very briefly since, as was typically the case in the rest of the Western world of the time, it was religious with the goal of preparing young men for a life in the church. Schools were scarce and there were few students. Subjects taught included Ethics and Latin as well as reading and writing. “The Church and the State worked together to civilize and Christianize the Cape Verdeans” (Bitter 1995, p. 56).

Non-secular schools made their appearance in 1817 with the opening of the first primary school in Praia, which had become the capital of the colony in 1731. By 1844 nearly all the islands had one or two elementary schools. In 1845 a law was passed which gave increased importance to elementary education. Subjects taught included reading, writing, mathematics, geography, and history of the Catholic Church and Portugal. In two provinces an expanded elementary school was opened in which drawing, physics and bookkeeping were also taught. Slowly the focus changed: children were being prepared for a life serving the State instead of a life serving the Church.

But only a few children had access to education. The colonial education system was very elitist (Barreto 1994), with the schools being reserved for families of the Portuguese administrators and civil servants with native Cape Verdean students being the exception. At the end of the

19th century, nearly 90 years after the opening of the first non-secular elementary school in the country, enrollment was around 4600 students in 60 schools, out of a total population of roughly 150,000 (Bitter 1995), which corresponds to 3.1% of the total population. Even the 1894 law expanding the right for an education to all social classes "...did not change the elitist character of education" (Bitter 1995, p. 57), since it was never implemented.

Other sources and statistics support these low enrollment figures. Meintel (1984) refers to early nineteenth century reports which "converge in their descriptions of the lamentable state of public education" (p. 135) in Cape Verde. She goes on to cite a 1913 Portuguese Ministry of the Colonies report which estimates illiteracy at 85 to 95 percent (p. 135). Government figures for 1958 show illiteracy in Cape Verde to be still 78.5%. Meintel (1984) concurs, reporting an average illiteracy rate of 80% for the period between 1958 and 1975 (p. 135). At the eve of Cape Verdean independence some reports have illiteracy rates as high as 92% (Bitter 1995), while others give a more conservative estimate of between 72 and 78% (Núñez 1995a).

The colonial government used education, particularly subjects such as Portuguese language and culture, to control the colonies and support the colonial system. The school programs aimed at alienating people from their homeland and making them subservient by granting them education. School books were also used to this end. For example, the life spans and reigns of the Portuguese kings, and the main and secondary railroad lines in Portugal were learned (Cape Verde has no railroads), but the geography of their own islands and the history of Africa were not taught.

In the consciousness of the students, the conveniences of the Portuguese metropolis emerged as desirable models of life. The human and cultural values and traditions of African nations were hidden and denigrated. As a result of this education, Cape Verdeans could be used in the administration of the other Portuguese colonies, since they regarded Africans as inferior (Barreto 1994, pp. 25-26).

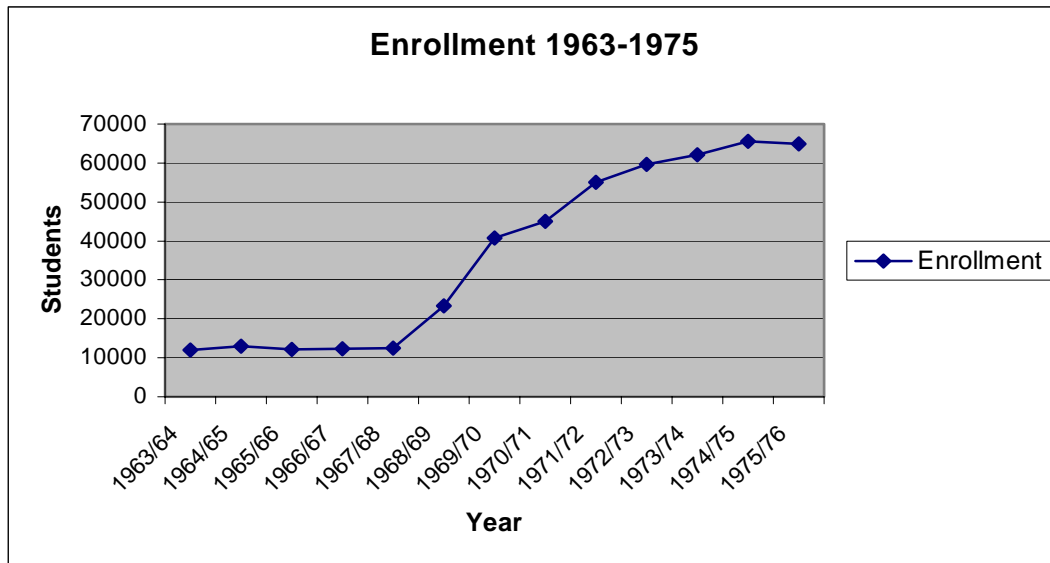
Antonio Salazar, the Portuguese dictator from 1926 until 1974, worsened the situation, and not only in the colonies. He stopped reform efforts and counteracted what few had been implemented. He actively put into practice his ideas on the virtues of illiteracy, closing schools in Cape Verde, even though the population was rising (Meintel, 1984). Afonso (1993) documents how Salazar's regime reduced obligatory education from four to three years, while

diluting the quality of the education, particularly in rural zones by creating “schooling posts” where “people (generally women) without any specific preparation [were] selected according to their ideological compliance and moral virtues” (p. 114) to teach instead of certified teachers. In 1963, teacher training institutions in Portugal, called Normal Schools, were closed, cutting off the supply of trained teachers throughout Portugal (Meintel, 1984). It was only during the last decade of Salazar’s rule that requirements for primary school teachers in Portugal were raised to three years of university (Afonso 1993).

Finally in the latter years of the totalitarian regime, education in Portugal, including Cape Verde, was allowed to improve, though the motives were not for altruistic or democratic reasons, but rather to indoctrinate the populace and to pacify the increasingly discontent colonies. School enrollment figures testify to the late implementation of this new policy. Revolutionary sentiments were growing strong enough to be a threat to the colonial empire, so school enrollments began to grow in a futile attempt to stave off the independence movement in the colony. “The expansion of the education system was not founded on economic grounds, rather out of political necessity – in order to take the wind out of the sails of the forthcoming rebellions and in order to put the Portuguese language, culture and traditions into the educational process as stabilizing elements that should support the colonial system” (Bitter 1995, p. 58). Chart 1-1 shows enrollment figures from 1963 until 1975, the year of independence.

A note about the statistics: Sources do not always agree on enrollment numbers, for example, Bitter (1995) reports an enrollment of 41,500 for 1970, whereas Barreto (1994), gives the number as 45,103 for the same year, even though both cite the Ministry of Education as the source. For consistency, all statistics in this paper use the highest enrollment figures given if the statistics conflict. Furthermore, even though mandatory schooling was, up until 1989, only four years, these figures include enrollment for the optional grades five and six.

Chart 1-1: Elementary school enrollment during the late colonial period, 1963-1975



The rapid expansion caused problems. “More children were included in education, but the quality did not increase, in fact the opposite occurred. Because of teacher shortages many teachers who taught in the countryside were hired with only four years of primary school behind them and one 40-day course as training” (Bitter 1995, p. 58). According to Barreto (1994), who cites the Ministry of Education, in 1975, the year of independence, there were only 36 trained Cape Verdean teachers in the country, despite the earlier opening of two teacher training institutions in Cape Verde (Escola de Habilitação de Professores de Posto Escolar which prepared teachers for EBE, Ensino Básico Elementário which covered grades 1-4, in 1969 and the Escola de Magistério Primário for teachers of EBC, Ensino Básico Complementário which included grades 5 and 6, in 1970).

In addition to low levels of teacher qualification and teacher shortages, the education infrastructure in the closing years of the colonial era was also inadequate to serve all the new students. Bitter (1995) asserts that not only were 400 out of the 600 classrooms rented, many of the premises rented were “inadequate; in some schools they had to sit the children on stone-scrap because there was no furniture” (p. 58). These problems and more were inherited by the new government when they took over in 1975.

However, even before the revolutionary party (PAIGC, which changed to PAICV in 1981) took power in Guinea-Bissau and Cape Verde, they had had some experience in opening and running schools. Amílcar Cabral, the revolutionary leader and a product of the elitist Cape Verdean education system, placed great importance on culture and education from the

beginning of the struggle for independence. When the PAIGC was founded in 1969, it placed emphasis on education, writing a policy in which education and professional training were declared national products to be directed by the national government, and where literacy and access to basic and vocational-technical education were to be expanded, whereas the influence of the Portuguese colonial administration was to be eliminated. Sports and physical education were also to be supported (Bitter 1995). In the late 1960s, as the revolutionary forces gained ground they founded bush schools in Guinea-Bissau – where the fighting actually took place – promoting an education that was appropriate for the conditions and requirements of the country and which valued the local culture, customs and traditions (Bitter 1995). In 1971/72 the PAIGC had 164 schools with 14,531 students and 258 teachers in the areas under their control. Unlike the elitist Portuguese schools used to promote the colonial empire, the revolutionary schools incorporated African history, geography and culture in addition to political-ideological education in support of the independence struggle. Students split their days working on plantations and going to school half-days.

It is also interesting to note that within 10 years the PAIGC sent more people abroad for higher education than during 500 years of colonialism: between 1471 and 1961 only 25 people were sent, whereas between 1963 and 1973 there were 497 people sent to study abroad (Bitter 1995, p. 59). Countries such as Cuba, the former USSR, and East Germany provided scholarships.

In summary, while education during the colonial period did undergo numerous changes, it was elitist in nature and was used to shape and control society according to the needs of the Portuguese motherland.

1.2.2. Education in the Republic of Cape Verde

1.2.2.1. The Situation at the Time of Independence

Education has been a national priority since independence in 1975. Indeed, several Articles of the Cape Verdean Constitution outline the function of education:

- Integrated education of the person
- Campaign against illiteracy
- Protection of cultural identity
- Democracy in education and culture
- Equal educational opportunity for all

Specifically, Article 15 states:

“Education aims at the integral preparation of the human being. It shall closely join productive work with the acquisition of qualifications, knowledge and values that permit the citizens to integrate themselves into the community and to enable them to contribute to their continuous advancement. The State views overcoming illiteracy as a fundamental assignment.”

Article 40 reads:

“Every citizen has the right and the obligation to education. The State provides step-by-step free and equal opportunity for all citizens at the various educational levels.”

Considering the situation the new government inherited, these seemingly modest articles would take a tremendous amount of effort and resources to realize.

The education system at the time of independence was ailing in nearly every regard. There were 428 elementary schools (EBE and EBC) serving 60,405 students in EBE and 4,281 students in EBC – five times the number of students as ten years earlier. The teaching staff was composed of roughly 1,200 teachers, though few were trained. At the time of independence, Cape Verde’s shortage of teachers with sufficient training was aggravated by the return of many teachers to Portugal. School repetition and drop-out rates combined to reach 29%, with only 50% of first graders completing the entire four-year cycle. Only 12% of the students continued on to 5th and 6th grades (Bitter 1995). Nationally, illiteracy rates were estimated at between 72% and 92% (Bitter 1995, Núñez 1995a).

The education system was structurally unchanged from the closing years of colonialism. It remained highly centralized and autocratic. All decisions were made, as during Portuguese administration, at the central level without wide discussion (Barreto 1995). The same was true at the school level, where the director made all decisions alone and teachers had no possibility of voicing their opinions.

Obligatory schooling was four years with Portuguese as the language of instruction starting from the first day of school. EBE was organized in a form typical of many elementary schools in the United States where one classroom teacher taught all subjects. These first four years

were followed by an optional two-year high school preparatory phase EBC, Ensino Básico Complementar, which was organized like a U.S. high school with teachers being subject specialists and only teaching that particular subject. Tables 1-2 and 1-3 show the class schedules for EBE and EBC in terms of numbers of hours per week for each subject for the first six grades, unchanged from the late colonial period.

Table 1-2: Ensino Básico Elementar hours per week by subject

Subject	Grade Level			
	1	2	3	4
Portuguese	6	6	6	6
Mathematics	6	6	6	6
Regional studies	4	4	3	3
Art	3	3	2	2
Music	2	2	2	2
Physical Education	2	2	2	2
Total hours per week	23	23	21	21

Table 1-3: Ensino Básico Complementar hours per week by subject

Subject	Grade Level	
	5	6
Portuguese	4	4
French	3	3
Mathematics	4	4
Social Sciences	4	4
Natural Sciences	4	4
Drawing	3	3
Art	2	2
Poly-technical education	4	4
Music	1	1
Physical Education	4	4
Total hours per week	33	33

Within the system there were several problems. Barreto (1995) asserts that EBE and EBC were completely separated physically as well as in subject matter. The schools used separate facilities, with the EBC schools only located in the population centers. Teachers for EBC received different training than for EBE. More importantly, the curricula for EBC were not adequately built upon the EBE program, compounding learning difficulties. For example, students no longer had one teacher for all subjects; teachers taught only one discipline. The number of hours per week and subjects also increased dramatically.

Portuguese as the language of instruction was carried over from the colonial system, even though Crioulo was (and is) Cape Verdeans' mother tongue. The language issue was compounded by the fact that many new teachers did not have sufficient mastery of Portuguese. In addition, instructional practices did not change from that of teaching Portuguese as a mother tongue to that of teaching it as a second language. Another problem was the overly academic orientation of the education which did not provide a balance between theoretical, practical and social knowledge (Barreto 1994). This was particularly problematic in the 5th and 6th grades where the subjects were "so complex and exaggerated that they in no way corresponded to the developmental necessities and possibilities of the Cape Verdean children, or their capacities" (Barreto 1994, p. 34).

In summary, the education system inherited by the infant republic was inadequate, both in terms of access and of quality, though expansion had been rapid under the new government.

1.2.2.2. Changes During the First Republic (1975-1991)

The new national government was of the opinion that an early reform of the education system was not possible (Barreto 1995, p. 29), so the education system continued relatively unchanged. The administrative structure remained the same as before as well as nearly all the curricula and textbooks. The most obvious changes were in the subject areas of history and geography where the names of Portuguese rulers, rivers and railroad routes were no longer taught – as soon as new textbooks could be prepared. Also, new guidelines for teachers and teaching material placing importance on Cape Verde's problems and its integration in the African continent were produced (Barreto 1995).

The government placed high priority on teacher training rather than systemic change. The 1,200 teachers, mostly young Cape Verdeans, were schooled in pedagogy and national politics, which was socialistic at the time. In addition, in 1974/75 there were year-long seminars for elementary teachers in Praia and in Mindelo.

The First National Plan of Development was proposed for the years 1982-1985, where the education sector promoted the abolition of the colonial components (including Portuguese culture). It asserted that schools should be aligned with the political and ideological development of the country and be in accordance with the actual conditions in the country. Priorities for the education sector were expansion of elementary school access and facilities,

adult literacy and professional training. Increasing the efficiency of the education system through reducing the drop-out and repetition rates was also considered a priority. Steps to be taken to achieve these goals included raising the general school entrance age to seven years, constructing and outfitting 144 classrooms, and conducting a new training program for 250 EBE teachers.

Foreign aid contributed to the national plans. One of the first foreign aid projects in education was a classroom construction and teacher training project sponsored by the United States Agency for International Development (USAID). From 1983 to 1986 scores of schools were built and hundreds of teachers were trained, but it was not enough to solve the country's problems in terms of school infrastructure and poorly trained teachers. Gonçalves (1986), writes in an end-of-project evaluation that "Cape Verde's primary teachers are severely under trained. Only 16.3% of the nation's current teaching force possess full primary training" (p. 27).

Another foreign aid project began in 1985. Projecto Educação 1 was a preparation for future reforms and consisted mainly of an external analysis of the sector. International assistance and advice has played a large role in the Cape Verdean educational system ever since. Bitter (1995), quotes Adriana Carvalho of the Ministry of Education as saying the Ministry became a "playground for international experts" (p. 64) in the 1980s.

The Second National Plan of Development (1986 - 1989) also had priorities for the education sector. Free basic education and health care were looked upon as the way to attain the goal of reducing regional and social disparities. Through education reform, an integrated overall structure of the sector was to be created which included improvements in administration and management, as well as revising contents and methods. The plan also called for increasing the capacity of teacher training and professional preparation institutions (Bitter 1995).

It was not until 1987 that the first structural changes were made in the Ministry. The central Ministry was reorganized and districts (called delegações in Portuguese, but referred to as districts in this paper) were created on each island to bridge the gap between the central services and the schools. These districts were (and are) headed by a delegate of the Minister, called delegado, with appointment directly by the Minister.

The Second National Plan of Development included an evaluation of the First National Plan of Development. In education, this evaluation showed that there had been improvement in quantitative terms – more students enrolled in new classrooms – but not in qualitative terms. Drop-out rates for EBC and ES (Ensino Secundário) rose and repetition rates did not go down. Investments in teacher training and system reform were only partially successful. For example, in adult literacy programs only 9,800 people were trained, far short of the planned 20,000 (Bitter 1995).

Education continued to be politically important throughout the first decades of the new republic. The PAICV 1988 party congress had as a motto for education reform: “Education is the basis for all development” (Bitter 1995). Changes continued even as the country moved towards a multiparty democracy, which, interestingly enough, came about through a combination of growing resentment of the PAICV’s repressiveness and increasing centralization of power and the government’s overconfidence in their own popularity (Lobban 1995). Numerous schools were built and teacher training seminars held. In 1989 mandatory schooling was extended to 6 years (Barreto 1994) and the school year was lengthened (Bitter 1995).

Nonetheless, there were still numerous problems to resolve, including high failure rates in school. School wastage was a constant problem at the end of the 80s.

The relationship of cost to use is, in the school system, clearly bad. The reduced professional qualification of the teachers brings poor scholarly knowledge with it. Because of limited academic expectations, many students do not reach the requirements and drop out – by the general track of the secondary school nearly half. One fundamental problem is that most of the students do not learn Portuguese adequately because they are not systematically taught it as a foreign language should be (Marques 1989, as cited in Bitter 1995, p. 66).

Minister of Education Tolentino (as cited in Bitter 1995, p. 65) gave the following reasons for the poor quality of basic education in the country, among others:

- High number of illiterate parents who were culturally poor and gave no importance to education (This phrase itself demonstrates the elitist mentality engendered by centuries of

Portuguese colonial rule since, by “culturally poor” it is meant the parents do not speak Portuguese well);

- Portuguese, a foreign language, as the language of instruction;
- Lack of resources;
- Poor administration;
- Poorly trained teachers.

One problem exacerbated by the government’s socialist, egalitarian philosophy was a shortage of teachers. During colonial times teaching was a high-status, high-prestige profession. Bitter (1995) reports that school directors even had a house at their disposal. After the revolution, teaching became less popular because of low pay and reduced social standing. Directors no longer had a house or car to use, for example. Qualified teachers left teaching and went to other types of work (Barreto 1994).

Recognizing the numerous problems, the Ministry declared 1989 as the ‘Year of the War’ against school failure. The Ministry intended to support teachers with optimistic success-oriented attitudes and campaigned against the hiring of teachers who justify failure rather than fight against it. Furthermore, the Ministry acknowledged that improvement efforts should be concerned with qualitative improvement and not solely focused on quantitative improvement. School failure was often announced, while at the same time it was also claimed that the education system in Cape Verde had never been as good as it was then (Bitter 1995).

Despite the rhetoric of the ruling party, gross spending for education went down during the final four years of the PAICV government, sinking from nearly 800 million Escudos (\$US 6.66 million) in 1987 to just over 400 million (\$US 3.33 million) in 1991 (Bitter 1995, p. 119, citing Ministry of Education statistics).

In summary, during the first decade and a half of national independence, education was a national priority. Access to education was expanded, though the lack of real structural changes kept quality low.

1.2.2.3. Change of Power, Change of Philosophy: The Second Republic (1992-2001)

Despite its best efforts, the PAICV did not garner enough electoral support to win the election in 1991, and Cape Verde became an unusual African country to have a peaceful change of

power in a free and open election. The young party MPD (Movement for Democracy) came to power. This change was the culmination of a move from a single-party system to a multiparty democracy.

The change of government affected the education system. In the 15 years of PAICV government, teaching contents and teaching materials were always dedicated to the party's political line (pan-African, socialist). The new government was much more capitalist in outlook, turning toward Europe for help rather than solely promoting African unity. Philosophically, the MPD looked upon the education system as an instrument for democratizing the country, and as the key to economic development.

In general terms, the situation the MPD took over was substantially better than the PAICV found when it had come to power, as the following statistics for 1991 show: The enrollment rate was 91% (Bitter 1995), with 56,349 in EBE plus 15,952 in EBC, totaling 72,301 students in 346 schools. There were 1,839 teachers, 416 of them with training (22.6%). The number of classrooms was also up substantially, to a total of 992, of which 221 were rented, 117 were loaned rent-free, and 664 belonged to the state (Source: GEP 1993). Qualitative changes were also taking place: repetition rates were on their way down from 29% in 1975 to 20% by 1993 (Bitter 1995). National literacy rates had also increased substantially, up to over 70%, with literacy being defined as having completed four years of schooling.

However, the government identified the following problems in the education system: poor quality, lack of coordination between the market and technological development, insufficient number of qualified teachers, poor educational infrastructure, and inequalities in educational opportunities.

To resolve these problems, the government proposed several measures. Higher education, such as institutes of higher learning, universities, research centers, data banks, and scientific information sources were to be built. International and regional cooperation (foreign aid, in other words) were to be involved in developing the education sector, particularly international organizations such as UNESCO. In addition, strengthening the connection between schools and communities and including teachers, parents, and students in the decision making process was proposed. Furthermore, integrating handicapped children in the education system was to be done through expansion of the canteen program, the establishing of a school health program,

and provisioning with didactic materials. Finally, out-of-school educational opportunities for drop-outs were to be implemented.

The new government accepted wholeheartedly the priorities as set out during the 1990 World Education Forum in Jomtien, Thailand, and the emphasis on “Education for All”. With this as its base, the government developed the Third National Plan of Development which, in terms of education, included as fundamental points:

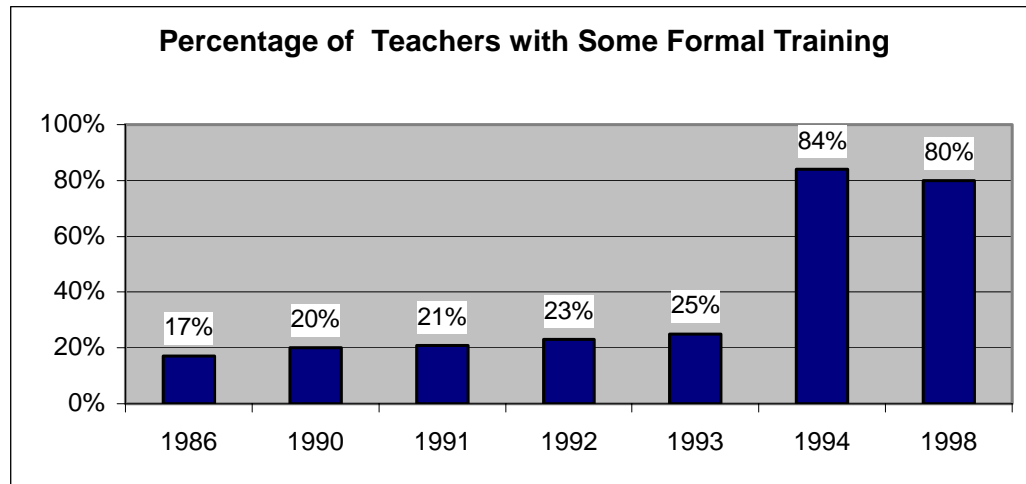
- Equal opportunity for all;
- Primary education as a priority;
- Multisectoral responsibility for primary education;
- Promotion of school success;
- Participation of the community in school policies;
- Coordination between formal education, non-formal education and professional training;
- Alignment with the labor market, installation of higher education, adaptation of new technologies, considering the development of the world.

With these objectives in mind, they established the following specific goals for 1992-95 (source: Bitter 1995):

- Preschool: Enrollment of 60% of 4-5 year-olds. Opening of 60 kindergartens, 40 rural, 20 urban, initial training of 100 pre-school teachers and in-service training for 150.
- Ensino Básico: In-service training for 1,500 teachers; initial training of 120 teachers, 60 principals, 20 planners, and 30 inspectors. Construction of 38 new schools, expansion of 36 schools (total 160 new rooms), and construction of the new pedagogic institute.

In the early 1990s a World Bank financed project, Projecto de Renovação e Extensão do Ensino Básico (Project for the Renovation and Extension of Basic Education), generally known as PREBA, was operating, and a part of the project provided in-service training for all untrained teachers in order to give them Cape Verdean government teaching certification. The results of this project can be seen in Chart 1-2 below. Note how the official percentage of teachers with some formal training rose dramatically between 1993 and 1994, the final year of this project.

Chart 1-2: Percentage of teachers with some formal training from 1986-1998



However since the school population continued to rise and therefore more teachers were needed, new teachers without any training continued to enter the teaching force. One may also have concerns about the quality of the teachers produced essentially overnight, such as the huge jump from 1993 to 1994. “Some formal training” could be a weekend course taught by a secondary school teacher, but under the auspices of an official program.

Donor organizations have played an important role in the growth of the Cape Verdean school system for decades. Numerous bilateral and multilateral projects have been carried out, everything from in-service training for teachers to scholarships for university study abroad, textbook printing, and school construction. Nearly all projects and donor organizations operate through the Ministry of Education, although Børnefonden, the Danish foundation for children, has provided direct financial assistance to thousands of children in the poorest of families in order for them to be able to attend school, a philosophy very different from most aid which works through government organs. The most important donor organizations have been UNESCO, UNDP, and ADB, while Portugal has been the single country with the closest cooperation with Cape Verde in the education sector. The education reform of 1994, for example, was designed largely with technical help from Portuguese experts (Bitter 1995). At the time of writing, the Ministry of Education receives aid, either financial or technical or both, from the following organizations and countries (Source: Ministry of Education 1999): UNDP; UNESCO; UNICEF; UNFPA; UNCDF; WHO; FAO; WFP; OPEC; Calouste Gulbenkian Foundation; the European Union; the World Bank; ADB; and development organizations of the following countries: Switzerland, Sweden, Germany, France, Austria, Belgium, Luxembourg, Portugal, The Netherlands, Morocco, Nigeria, and Japan.

The reform of 1994 was the most comprehensive to date in Cape Verdean education. To begin with, there was another reshuffling of the central Ministry and it received a new name, the Ministry of Education, Culture, Youth, and Sports (MECJD). Of more significance to the students and teachers, EBE and EBC were combined into EBI, Ensino Básico Integrado (Integrated Basic Education) so that all six required grades followed the same structure, one similar to that of the former EBE. The six years were divided into three two-year phases, and one teacher taught all disciplines to a class.

Infrastructural limitations led to the creation of a polo-satellite configuration. Since only four years of elementary education had been the requirement, most schools had only two classrooms, each of which served two classes, one in the morning and one in the afternoon. Larger schools were generally only found in population centers, and they became “Polo” schools. Polo schools, having more space, offered all six years of primary schooling, while satellite schools, usually only having two rooms, offered only the first four years. This means that students from satellite schools have had to travel a greater distance to attend fifth and sixth grades. They almost invariably walk as there has never been school bus service and very few people have automobiles. The polo-satellite constellation was intended as an interim situation and construction of more classrooms has proceeded, turning some satellites into pólos as they have grown. In São Filipe, for example, the number of pólos grew from 10 to 15 between 1996 and 1999.

Another major change was the introduction of a new subject, Ciências Integradas, an integrated science curriculum which combines the social sciences of history and geography with the so-called hard sciences such as biology and botany. Portuguese was retained as the language of instruction and it was still taught the way it had always been taught – as a mother tongue rather than as a second language. Art, music and physical education were loosely tied together under the title “expressões” (expressions), while mathematics was the fourth main subject. Classes were held in morning and afternoon shifts, with a group in the morning and a different group in the afternoon. Some schools still had three shifts, because of a shortage of space. Total hours of schooling per week were reduced in all grade levels. The EBI weekly course load in hours and minutes per week (H:MM) is presented in Table 1-4 below.

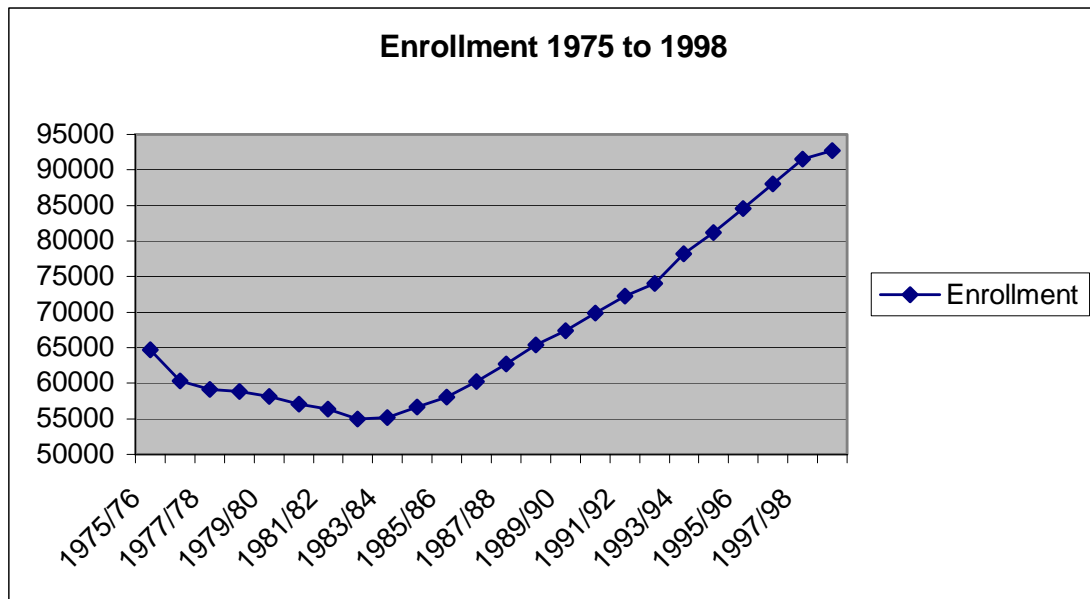
Table 1-4: Weekly course load for elementary students in EBI

Subject Areas	Phase 1 1/2 grades	Phase 2 3/4 grades	Phase 3 5/6 grades
Portuguese language	5:50	5:50	5:15
Mathematics	5:50	5:50	5:15
Integrated sciences	3:20	4:00	4:40
<u>Expressões</u>			
Art education	1:20	1:00	2:30
Music and drama education	1:20	1:00	1:45
Physical education	1:40	1:20	2:00
Total hours per week	19:20	19:00	21:25

A further part of the reform effort was a large-scale teacher in-service training program known as PREBA II (1996-1998) which attempted to reach the remainder of untrained teachers already in service. Unfortunately, approximately 40% of the participants in the PREBA II training failed one or more parts of the training program and so did not receive certification. At the time of writing, the Ministry is actively seeking financing to re-teach these still uncertified teachers.

“Education for All” goals, set in 1991, were largely met within the first decade. In 1998 the gross enrollment surpassed 100%. Net enrollment for the same year reached 98% (UNICEF 1999). Chart 1-3 shows the growth of total enrollment in grades 1-6 from independence until 1998. As the chart shows, growth increased rapidly in 1986 and continued at approximately the same rate until tapering off in 1997. It is interesting to note that the explosion in growth preceded the extension of obligatory schooling in 1989. This reflects the high social demand for increased educational opportunities, a demand which is visible today in the rapidly growing optional secondary schools, even though parents must pay tuition.

Chart 1-3: Total elementary school enrollment from 1975 to 1998



Unfortunately, the rapid growth in the secondary system has placed great strains on the elementary education system, in terms of personnel and facilities. The elementary teacher training institutions (Pedagogic Institutes, or IP) are not able to keep up with the demand for elementary teachers since, in part, new teacher graduates of the IP have been entering the ISE (Superior Institute of Education) in order to become secondary teachers who earn more and are held in higher esteem (according to Adriana Carvalho, the then-president of the IP). At the same time, experienced elementary teachers have been applying for the numerous secondary openings. Personnel shortages have also led to the hiring of college graduates and experienced people from the field, even though they do not have any pedagogic training or experience; a problem which concerns their colleagues and many parents. Furthermore, in some areas elementary classrooms have been taken over by the booming high schools, forcing classes to be held in make-shift facilities (such as the tiny one-room municipal library in Mosteiros). Both of these factors have had an impact on the quality of elementary education. The situation suggests that the Ministry is satisfied it has reached its goals (quantitative) and is now moving on to the next item on the agenda, namely the expansion of the secondary school system (again quantitative), while neglecting the problems of quality persistent in the elementary schools. However, the current administration, elected in early 2001, has shown signs of concern about the quality of primary education and has reduced emphasis on expanding secondary schools.

Nonetheless, since independence Cape Verde has made great strides in expanding and improving its basic education system. Table 1-5 shows a comparison of the systems in 1975 and 1998.

Table 1-5: Comparison of elementary schools statistics for 1975 and 1998

Element	1975	1998
Total Enrollment	64,686	92,523
Net Enrollment Rate	N/A	91%
Number of Schools	428	407
Number of Teachers	1200	3264
Qualified Teaching Force*	3%	80%
Repetition Rate**	29%	11%

* Qualified means having had some formal training

** Repetition rates are calculated by dividing the number of students enrolling as repeaters by the total number of students enrolling in that school.

In the years since independence, total enrollment is up by 43 percent while the teaching force has grown at a much faster pace (172 percent), reducing pupil/teacher ratios. Interestingly, the total number of schools is down, from 428 to 407, perhaps because the trend towards urbanization has forced the closure of some rural schools, while some former EBC school buildings were combined with a nearby EBE into one school. Repetition rates are down, though it is impossible at this point to determine whether the cause is the increased percentage of teachers with some pedagogic training (from 3 percent in 1975 to 80 percent in 1998), the reduced pupil/teacher ratio (down from 53.9:1 in 1975 to 28.3:1 in 1998), the curriculum reform and new teaching materials, better student nutrition (World Food Program has been sponsoring a school lunch program), some other factor, or a combination of factors.

Despite these successes, serious issues of quality remain to be solved. Repetition rates still do not meet Ministry expectations and the teaching force remains inadequately trained to a large degree. Furthermore, as previously noted, pressure from the growing secondary education is straining the still fragile elementary school system. In addition, the Ministry has been discussing expanding obligatory schooling from six to nine years and including computer instruction as well as two foreign languages (French and English), beginning with the 5th grade.

1.2.3. The Cape Verdean School System Today

Further expansion would be difficult. The extension of mandatory schooling from four to six years aggravated the already grim shortage of adequately trained teachers, and facilities are still limited, as the continued existence of the polo-satellite system shows.

Polo schools are nominally run by school principals, called *gestores*, who in fact have little administrative power, serving mostly as information conduits between the district administration and the schools and teachers. *Gestores* have a two-year contract and receive a stipend totaling 30% of their normal pay as teachers. None of the *gestores* are certified nor have most received any training in administration or any of the fields normally associated with running a school. The only training which has been done so far has been through a project sponsored by the German government, and this only on the islands of Fogo and Brava. The teacher training institutes, IP, conducted a formal course of study for principals in 2002, but discontinued it because of lack of funding. However the current incentive and career structures do nothing to encourage principals to stay in their schools. In fact, few principals stay in their position for very long. In the districts of Brava, Mosteiros and São Filipe, for example, during a two year period from 1996-1998, 12 out of 23 left and were replaced by teachers.

Pólos and satellite schools, along with the high schools and adult literacy programs, form districts, called *concelhos* in Portuguese, of which there are 17 in the country. These districts are headed by a *delegado*, who is literally a person delegated by the Minister of Education to act in his stead. *Delegados* have nearly absolute power in their districts and are answerable only to the Minister. They make all personnel decisions, including hiring teachers, appointing *gestores* and pedagogic coordinators, and they are responsible for the formal evaluation of all personnel within the district. In Brava, Mosteiros, and São Filipe, the *delegados* all have backgrounds as teachers. However, like the *gestores*, *delegados* have no special qualifications and none of them have had administrative training.

Assisting the *delegado* is the group of pedagogic coordinators, called the *equipa pedagógica* (pedagogic team). Normally composed of six coordinators, the *equipa pedagógica* has mainly academic responsibilities. Besides collecting statistical information and preparing common district-wide examinations, the coordinators have the assignment to improve teachers' teaching through supervision and in-service training. Like the *gestores*, coordinators receive 30% more pay than teachers, though they only have single year renewable contracts. Coordinators,

despite their assignments and responsibilities, do not have any special training, although the Ministry rules require that they have Pedagogic Institute training or equivalent (which includes the previously described PREBA program and its successor) although the practical difference between the training systems is great. Job turnover is also high. Out of 22 coordinators in the districts of Brava, Mosteiros and São Filipe only five have been there more than five years.

The seventeen districts and all other activities in the education sector are run by the central Ministry of Education, Science, and Sports (MECJD), located in the capital city of Praia. The Ministry is headed by the politically appointed Minister of Education, who heads a large bureaucracy with departments for primary schooling, secondary schooling, adult education, inspection, research and school improvement, and others. The teacher training institutions, the *Institutos Pedagógicas*, are officially outside of the Ministry bureaucratic structure, though recent restrictions have been placed on their autonomy.

The *Institutos Pedagógicos* are charged with preparing and improving elementary teachers. There are only two full institutions, opened in 1994, and one branch location opened in 1997. The main *Instituto Pedagógico* is in the capital city of Praia, on the island of Santiago. It is a three-story structure with around 20 classrooms. The IP Praia has a branch located in Assomada, the fastest-growing region in the country, in the mountainous interior of Santiago. The second full IP is on the island of São Vicente in the commercial capital of Mindelo. The smaller IP in Mindelo is housed in an older school building with six classrooms. The education offered at the IP is a three-year program, divided into two years of formal classroom instruction and one year of supervised student teaching. The program tends to be very theoretical with lecture as the main methodology used. Nearly all of the instructors at the IPs are either foreigners or foreign-trained as Cape Verde does not have a university. In total, the IPs produce around 200 graduates per year.

1.2.3.1. The Statistical Picture

The data for the 1998-1999 school year listed 407 elementary schools in the country. These schools' enrollments range from 7 to 1,827 students with faculties varying in size from 1 to 62. The schools are officially classified as one of two types of schools: polo or satellite. This configuration exists because of historical reasons already outlined earlier.

Table 1-6 shows the statistical information by year for schools nationally. Enrollment varies from 10 to 1,827 students. However, since 10 is the legal minimum to keep a school open, enrolment in very small schools may be inflated in order to keep the school open. Since the mean is substantially larger than the median, the statistics show that most schools are smaller than the mean. The same is true of the number of teachers in each school, though the difference is less. Pupil teacher ratios also show a lot of variation, ranging from 10:1 to 39:1, though the nearly identical values for the mean and median indicate few schools have extreme pupil/teacher ratios. Repetition rates follow a similar pattern, with the minimum being 0% and the maximum 31.6%. The mean and medians are also very close, indicating few schools vary much from the mean.

Table 1-6: Profile of Schools 1998-1999 School Year

School Attribute (N= 406)	Minimum	Maximum	Mean	Median
Enrollment	10	1827	356.7	255
Pupil/Teacher ratio	10.0	39.0	29.1	29.2
Number of Teachers	1	62	17	14
Repetition rates	0.0%	31.6%	10.2%	10.1%

Some schools in Cape Verde teach multiple grade levels at the same time. The number of mixed-level classrooms is not determinable from the data, but the number must be small. In visits to more than 60 schools by the researcher, he has only come across three schools with multilevel classes, all of which were in very small schools located in remote regions and some of which were only reachable by foot. None of these schools are polo schools.

In sum, the public school system in Cape Verde has undergone many changes during its long history, with most of the changes coming since independence as the country struggles to achieve economic independence. Most obvious is the change in philosophy from elitist to populist, as the enrollment rates testify. In addition to broad access to schools, the education system has seen qualitative improvements, particularly through teacher training. However, the ever increasing population coupled with a reduction in bilateral aid in education means the country will have to improve quality even more in order to get the most out of its limited resources.

1.3. Statement of the Problem

The problem can be stated simply: Persistent low quality in Cape Verde education despite huge inputs from foreign donor and education as a national priority. Elementary school students are not learning as they should as vocalized by individual parents and according to the Ministry's expectations. The author has attended numerous meetings with parents in which they have expressed concerns that their children cannot speak Portuguese, for example. Ministry expectations are formalized in final exams and standards for passing. Test results show poor understanding of the material, and repetition rates reflect the large number of students who repeat grades, having failed to master the required materials. A term used to describe this situation is wastage.

“Wastage in the flow of students is manifested quantitatively in the form of dropout and repetition, while the quality of learning is determined by the inputs and outputs of the education system” (World Bank 1980, p. 30). “Low learning achievement, although not falling strictly into the traditional definition of internal efficiency, is considered these days as perhaps the most important, if not the ultimate, aspect of wastage in education” (EFA Forum Secretariat 1998, p. 6).

Elementary students who advance without adequately mastering the objectives for the given year require extra help to catch up, if they ever do, and those who continue on to secondary school are unprepared for the more advanced studies. Furthermore, those who leave school without learning are not educated enough to work in anything but manual labor.

The problem can be looked at from an economic point of view. The system is not working as efficiently as it should be in terms of students mastering the requisite material and advancing from year to year. This increases costs, something a poor developing country like Cape Verde cannot afford.

Enrollment figures can be used to estimate efficiency: Two types of enrollment figures are used, gross enrollment and net enrollment. Gross enrollment is the total primary school enrollment, regardless of students' ages, divided by the number of primary school-aged children. Since some children not usually considered as being of school age attend school, this number can exceed 100%. Net enrollment rates, on the other hand, only calculate the proportion of school-aged children enrolled in school. UNICEF (1999) figures for Cape Verde

have gross enrollment at 131% and a net enrollment of 91% which shows that nearly 22,000 of the 93,000 students are older than normal school age (23.7%). This signifies that students take more than six years to complete their required six years. The author has seen physically mature 16 year-old sixth-graders sitting next to their much smaller and younger classmates. This also means that nearly one third of the student body should not be in the elementary schools any longer. As a result, the school system is much larger than it needs to be, a fact which translates into increased costs – more teachers, more classrooms, more materials, and so forth. Considering that the population is growing at an average rate of 2.9% per year, the system has to make space for these new and future students, a prospect with huge financial implications – hence the need for improving quality so the students master the required material in the six years allotted.

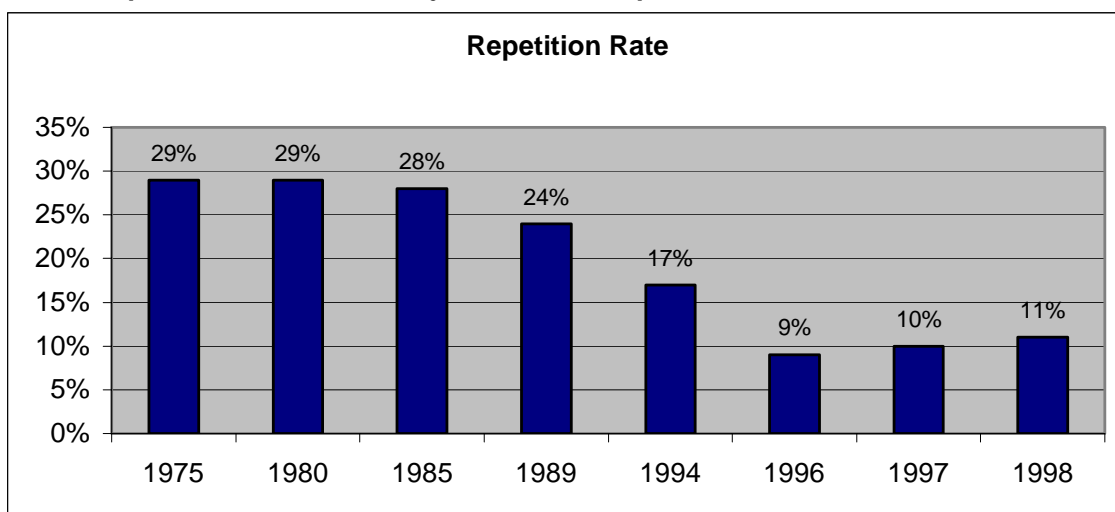
The economic perspective is an important and valid one in a country as poor and small as Cape Verde. Foreign aid has helped, but the country cannot forever depend on the largess of others, particularly when political winds can change so quickly. Indeed, aid to education in Cape Verde is diminishing. Certain countries no longer support education projects (such as Switzerland, the USA, and the UK), while others are reducing or stopping (Denmark, Germany, and The Netherlands). In addition, one must wonder for how many generations the Cape Verdean emigrant communities in the USA, Portugal and The Netherlands will continue to be as generous as they are now to their increasingly distant relatives. There are many second or third generation Cape Verdean-Americans who, upon visiting their ancestral homeland for the first time, vow never to return. Some, unable to tolerate the difficult living conditions, strange food and foreign language, have even broken off their trips early to return home. Incidences such as these raise doubts as to whether the remittances will continue at their present substantial levels.

Besides the problems that wastage inflicts on the economy, it also affects the individual students. “In today’s knowledge-based society, those who obtain a good basic education can continue to learn throughout their lives and thus remain economically viable, while those lacking a solid educational foundation are destined to fall further and further behind” (EFA Forum Secretariat 1998, p. 6). Wastage, therefore, is not only bad for the country, it is also bad for the individuals who do not learn.

From an educational point of view, low student success is also a problem. The statistics show that the students are not learning what they need to be learning and the system is failing in its mission, particularly considering the goal is to educate all children.

Repetition rates were stable from 1975 until 1989 when they started to decline. Chart 1-4 below shows the rates for selected years from 1975 until 1998. The repetition rates were calculated using Ministry of Education enrollment figures where the number of students registered as repeating the grade was divided by the total number of students enrolled. Data was not available for all years so the intervals vary. However, data for 1996 through 1998 was available and shows an increasing tendency. While repetition rates have dropped substantially over the years, they only dipped below 10% for one year and they appear to be creeping upwards once again. The 1996 drop in repetition rates can be attributed to a change in the promotion/retention system. After 1995, students automatically advance from the odd-numbered grades to the even-numbered grades. First, third and fifth graders automatically advance. For grades 2 and 4, however, students must pass an examination to advance to the next year. Since repetition rates are calculated at the aggregate school level, the figures incorporate students who automatically advanced regardless of their academic achievement. The rates are climbing once again as the students who did not master their material are getting stuck in the even-numbered grades.

Chart 1-4: Repetition rates for select years since independence



Despite the worsening trend in terms of repetition rates, Cape Verde is still better by far than other African countries. By comparison, in Mozambique, another former Portuguese colony in Africa, the repetition rate in 1998 for grades 1-5 was 28.0% (source: Ministry of Education, Republic of Mozambique), equivalent to that in Cape Verde right after independence.

Mozambique does not have an automatic passing policy like the one in Cape Verde. Madagascar has a failure rate of more than 33% in primary school (World Bank 1994c). Postlethwaite (1998) reports on a study of schools in 14 least developed countries, which includes some urban schools in Cape Verde, and cites “high” average primary repetition rates of 12 to 17 percent. However considering four countries (Bangladesh, Ethiopia, Tanzania, and Zambia), nearly a third of the countries surveyed, report extremely low repetition rates of one to two percent, one can see that several if not all of the remaining countries have very high repetition rates.

Poor student performance is one strong indicator of ineffective schooling. Tables 1-7, 1-8 and 1-9 contain data from the Cape Verdean Ministry of Education’s analysis of 1996 student final exams in Portuguese language and mathematics, respectively, showing student failure rates on specific objectives of the curriculum, aggregated nationally. These exams are given at the end of grades 2, 4 and 6.

Table 1-7 provides information on specific language abilities associated with higher level thinking skills, grouped by grade levels. Table 1-8 shows data on specific language skills which occur throughout the elementary years, showing the percentage of students who failed specific objectives of the final exam. Three general competencies are shown, Comprehension and Written Expression, Functions of Language, and Writing, each with specific skills shown. Since the number of questions pertaining to each skill varies, their weight in the final scoring also varies. Table 1-9 presents similar data on mathematical skills. Several of these figures are striking, particularly the results showing that over 63% of sixth grade students failed to form sentences correctly and 43.5% of sixth graders could not satisfactorily solve math problems.

Table 1-7: Student failure rates in selected skills in Portuguese language

2 nd Grade	4 th Grade	6 th Grade
<ul style="list-style-type: none"> • 25% cannot read orally with clear articulation and intonation • 31.3% cannot interpret simple paragraphs • 23.5% cannot rephrase sentences in their own words • 49.8% cannot write original sentences (34.6% received a zero) 	<ul style="list-style-type: none"> • 39.3% cannot make inferences from sentences • 48.9% cannot identify imperative sentences • 37.5% cannot explain the significance of sentences • 61.0% cannot produce a dialog over a given theme 	<ul style="list-style-type: none"> • 42.2% cannot interpret simple paragraphs • 40% cannot explain passages in their own words • 63.9% cannot complete sentences with correct verb forms (conjunctive/present tense)

Table 1-8: Student failure rates on the Portuguese language final exam by grade level.

Component	Grade Level		
	2 nd	4 th	6 th
Comprehension and Written Expression	22.6%	29.4%	24.0%
<ul style="list-style-type: none"> • Identify nouns in the text • Identify quotes, sentences or sentiments of people in text • Interpret subject matter of text • Add a title to a text • Order sentences, explain the significance of sentences, and explain expressions 	20.1%	11.9%	0.57%
	16.1%	39.3%	12.8%
	21.3%	n/a	42.2%
	32.1%	28.8%	n/a
	23.5%	37.5%	40.6%
Functions of the Language	28.1%	24.9%	35.9%
<ul style="list-style-type: none"> • Form sentences • Spelling 	22.6%	34.0%	63.9%
	24.9%	15.8%	7.9%
Writing	49.8%	61%	11.2%

Table 1-9: Student failure rates on specific mathematics skills on the final exam by grade level.

Content	Grade Level		
	2 nd	4 th	6 th
Comparison of numbers	13.5%	3.5%	11.8%
Representation of numbers in line	36.2%	37.2%	n/a
Numerical Calculation	20.7%	14.6%	24.4%
Problem resolution	29.5%	32.8%	43.5%
Geometry	3.5%	20.5%	33.0%

These tables show that student learning of required materials is at a low level.

1.4 Significance and Rationale of the Problem in its Broader Aspects

Improving the quality of basic education in Cape Verde is important. Cape Verde, an island nation with virtually no exploitable natural resources, depends on developing its service sector economy, a fact which the Cape Verdean government recognizes. According to Official Bulletin No. 52, 29 Dec. 1990, Capital II, Article 8, “The education process integrates theoretical and practical training, contributing in general to the global development and harmony of the country and, in particular, to the development of the economy....” Emphasis on developing basic education is an appropriate priority, especially considering the strong evidence showing how economic development in less-developed countries depends on education (World Bank 1995), particularly for “island nations and nations lacking vast stores of natural resources or a strong agricultural base” such as Cape Verde (Hartwell and Vargas-Baron 1998, p. 4). The Education For All Forum Secretariat (1998) claims that “a close parallel exists between the rate of economic growth of a country and the overall level of education of its active population” (p. 25). Sarah Graham-Brown (1991) asserts that “education may not be a panacea for under-development, but it is certainly a precondition for development” (p. 303). Under the heading “Future Priorities for Aid in Education”, she advises, “basic education for all (access to school, and to continuing educational opportunities, including literacy, for adults and out-of-school children) should be a key goal for national governments and the international community. Its implementation needs to be sensitive to the local social, economic and political context” (p. 301).

Education as a national priority is reflected in terms of budgetary considerations. In 1996, the Cape Verdean national government allocated 15.5% of its budget to education (African Development Fund 1996, p. 7) and for 1999 increased it further to 19% (Economist Intelligence Unit 1999, p. 59) while for 2000 it dropped a little to 18% (MoE 1999). This compares to 14.7% for Senegal and 11.98% for Cameroon (Groliers, 1995), other developing countries in Africa. In developed countries, the numbers are typically much less. Sweden spends 8.6% for education whereas Portugal devotes 10.02% (Groliers, 1995). The United States federal government dedicates a mere 1.8% (Groliers, 1995) of its budget to education, but this by no means reflects true spending because state and local governments bear the brunt of the costs of education. In summary, compared to other countries, Cape Verde’s commitment to education in terms of budgetary allocation is significant.

Despite the strong financial commitment to education, qualitative improvement is still necessary. While Cape Verde, with help from foreign aid agencies and organizations such as the World Bank, has achieved a high gross enrollment rate of 131% (Source: UNICEF *Situação Mundial de Infância 1999*). The gross enrollment rate is achieved by dividing the number of children enrolled in school by the entire population of school-aged children. The result higher than 100% shows both the success of the expansion of elementary schools and the lack of success of many students to learn, which forces them to repeat even if they are older than the official school ages. Ministry of Education figures show net enrollment (percent of school age children enrolled in school) to be an impressive 98% (Source: Cape Verdean Ministry of Education). This means, however, that nearly one third of the students in grades 1-6 are older than the normal schooling age. According to UNICEF (1999), 40% of children who begin school do not reach fifth grade. The repetition rate, reported by the Ministry of Education to be 10%, is unacceptably high for the Ministry and for many parents.

Cape Verde is not alone in its need to qualitatively improve its primary education. “In the poorer countries of the world, particularly those in Africa, South Asia and Latin America, public financing for education is unable to keep pace with rapidly increasing populations and school enrollments, resulting in a notable deterioration of school quality” (Hartwell and Vargas-Baron 1998, p. 1).

Despite earlier research questioning the impact of schools on children’s development (Coleman 1996), schools are important for learning. Indeed, Farrell (1993) and Farrell and Oliveira (1993) argue that the less developed a country is, the more impact schools have on student learning. Fuller and Heyneman (1989) report similar findings, asserting “the independent influence of school factors appears to be much greater in the Third World than within industrial countries” (p. 13). Heneveld and Craig (1996) support these assertions. “The quality of the school (in-school variables) seemed to influence student achievement more in developing nations than in industrialized nations where school quality was overshadowed by the child's family background (out-of-school variables)” (p. 11). Here the questions arise, “What makes a school effective?” and “How can we make schools effective in developing countries?”

1.5. Rationale for the Study

School quality in general is unsatisfactory in Cape Verde’s elementary schools, so improvement is necessary if the country is to develop. Information is needed to help formulate

appropriate improvement strategies and develop policies (Cheng 1999). Investigating schools that are perceived as superior or effective in the belief that something can be learned from them is a logical approach that has been used in the USA and elsewhere.

The study of schools identified as effective has produced an enormous body of literature in numerous countries, but the United States has produced the lion's share. List after list of characteristics, practices, attitudes and beliefs have been published. These, in turn, have been used as the basis for numerous school reform movements and policy decisions. Regardless of the lack of agreement on exactly what it is that makes one school more effective than another, the literature is clear on the point that there are differences in school effectiveness.

School effectiveness research has also taken place outside of the United States and some commonalities are emerging. Teddlie and Reynolds (2000) cross index 16 independent variables commonly used in quantitative analyses of school effectiveness and whether or not they are found to correlate with school effectiveness in nine countries, two of which (Belgium and Canada) are bilingual and have two major cultures as a result. The research they cite identified the following variables as positive predictors of student outcomes in the majority of the studies: Level of expected further education, teacher expectations, and opportunity to learn. Some indicators appear in four studies, namely: father's occupation, and homework.

Other variables appear to be more culture-specific. For example, they cite research in The Netherlands which indicate that two criteria commonly associated with school effectiveness in elementary schools in the United States only appear in five of 29 studies evaluated, and, contrary to findings in the U.S., if instructional leadership is identified as a factor, it is with a negative association to effectiveness (p. 20). However, without research within a specific cultural context, it is not possible to determine which factors are common and which are cultural specific.

Furthermore, there has been relatively little literature available from developing countries (Fuller and Heyneman 1989, Samoff 1994a). Teddlie and Reynolds (2000), in their *International Handbook of School Effectiveness Research*, devote only two out of over 300 pages to studies in developing countries. What literature that does exist has tended to focus on "structural aspects of the school," such as teacher/pupil ratios, percentage of students with textbooks, whether or not a school has a library, teachers' level of education, and so forth

(Fuller and Heynemann 1989, p. 16), rather than, for example, on how scarce materials are used in the schools and in the classrooms, if they are being used at all. “The school effectiveness research community in the developing world appeared in the late 1980s to simply have picked up the notion of the ‘quick fix’ emanating from the pages of books and journals from the developed world in the 1970s and 1980s, and transferred it to their own arenas” (Fertig 2000, pp. 392-393). Riddell (1997) cites Jansen (1995) in saying “the second wave of school effectiveness research, which emphasized process variables such as teaching style rather than physical inputs alone, was virtually overlooked in the Third World” (p. 187) and that “belatedly, researchers in developing countries are recognizing the need for contextualized, qualitative studies” (p. 187).

Therefore, a crucial step in the campaign to improve student outcomes in Cape Verdean schools is to conduct research on how exemplary schools function and see if the models so far applied – models based on research from developed countries – are appropriate and useful. From this information, clearer strategies and plans can be developed. Indeed, nearly 15 years ago Fuller and Heyneman (1989) pleaded for exactly this type of research:

Research in developing countries should, however, provide more textured portraits of life in classrooms. Production-function models emphasize learning that results from the simple insertion of physical goods into the classroom. In the Third World, this representation is accurate in some instances, as we have seen. Yet students of school effectiveness in the U.S. stress the importance of how resources are mobilized and managed by teachers and how these instructional tools are embedded in the classrooms' social rules to motivate students. These factors may be particularly important under conditions of material scarcity (p. 17).

Samoff (1999) put things more simply, stating, “The voices of teachers, students, and parents can scarcely be heard” (p. 253). This paper is an attempt to allow those voices to be heard.

1.6. Objective and Major Questions of the Study

1.6.1. Objective of the Study

The objective of the study is to investigate how change in elementary schools in developing countries can be brought about. The study will analyze a common school effectiveness model from the perspective of Third World educators to see if it is a useful model. Further analysis will focus on how qualitative improvement was brought about in some schools in Cape Verde.

1.6.2. Major Questions of the Study

The current study attempts to answer the following two questions:

1. Does the model of school effectiveness from developed countries fit Third World schools?
2. What are interventions which can bring about changes in Third World schools?

1.7. Definitions of Key Concepts

Certain terms important to the study and used in this paper are defined as follows:

Elementary or primary education

Elementary education, also referred to as primary education, **is defined as education intended to meet basic learning needs, which are the knowledge, skills, attitudes and values necessary for people to survive, to improve the quality of their lives and to continue learning, generally regarded as grades 1-6 and include children age 6 and older.** Basic education carries a similar definition but usually not restricted to children.

This definition is taken directly from the 1990 Jomtien World Conference on Education for All declaration on basic education, whereas grades 1-6 is considered “the most widely accepted norm...” (World Bank 1980, p. 16) for elementary education.

Culture

Culture is “one of the two or three most complicated words in the English language” (Williams cited in Angelides and Ainscow 2000, p. 147) and has numerous aspects and definitions. The simplest is perhaps Hargreave’s (1995), which is “the way we do things round here” (p. 25). From this simple definition, one can see that each group of “we” in any given “round here” can have a different way of doing things and therefore its own culture.

Applying this to schools, Hopkins et al (1994) came up with six dimensions of culture:

1. *Observed behavioral regularities* when teachers interact in a staff room – language and rituals they use;
 2. The *norms* that evolve in working groups of teachers such as in lesson planning or monitoring students' progress;
 3. The *dominant values*, or its aims, which are sometimes formulated in a mission statement;
 4. The *philosophy* which underlies beliefs about teaching and learning;
 5. The *rules of the game* new teachers have to learn to adapt to the school;
 6. The *feeling or climate* conveyed by the way the school is arranged and decorated.
- (Hopkins et al 1994, cited in Angelides and Ainscow 2000, pp. 147-148)

Taking these six dimensions as a base, the following definition of culture is used for this paper:

Culture is defined as the shared behavioral regularities, norms, values, beliefs, customs, practices, symbols, interpretations, and perspectives of a particular group of people.

In this study, there are two main groups whose culture is of direct interest to the school context: the town or part of the city in which the school is located and the community within the school, which is commonly known as the school culture. "School culture encompasses variables that reflect the values, attitudes, and norms reflected in the behavior of persons within the school" (Shann 1999, p. 391).

Within each school culture, several sub-cultures can exist, such as those of teachers. "Teaching cultures are embodied in the work-related beliefs and knowledge teachers share – beliefs about appropriate ways of acting on the job and rewarding aspects of teaching, and knowledge that enable teachers to do their work." (Feiman-Nemser and Floden, 1986, p. 508)

Effective schools

One of the first difficulties in bridging the school effectiveness research gap between developed countries and developing countries is the definition of an effective school. "What is an effective school?" is a question that must be answered before one can identify what it is that makes a school effective. Definitions of an effective school in the literature have varied. Indeed, Gaziel (1996) argues that in Israel even within a school definition of effectiveness vary from stakeholder group to stakeholder group. In a mixed-methods study intended "...to

compare parents', teachers', students' and principals' rating of the importance of school effectiveness indicators" (p. 488), he found that "parents attach much more importance to school outputs, such as academic achievements and client satisfaction, than do the other sub-groups, which supports the 'goals' model" (p. 489), whereas students "...attach great importance to teaching skills...", which supports the 'system resource' model. For teachers, "...diffusing values among students is the most important indicator of school effectiveness...." which falls within the 'process' model. Principals, by contract, "...perceive school effectiveness in terms of collecting inputs which can fuel the school processes and lead to school success", a 'system resource' model perspective.

Gaziel (1996) cites Cameron (1984) and Mackenzie (1983) in presenting six different models whereby effective schools can be classified, namely goals, system resource, internal process, strategic constituencies, legitimacy, and organizational learning. The definition of an effective school varies depending upon which model is used. The table below shows the models and their resulting definitions.

MODEL	DEFINITION OF SCHOOL EFFECTIVENESS	WHEN MODEL IS USEFUL
	A school is effective if...	Model is useful when...
GOALS	it can achieve its stated goals	goals are clear, consensual, time-bound, and measurable.
SYSTEM RESOURCE	it can acquire needed resources and inputs.	there is a clear relationship between inputs and outputs.
INTERNAL PROCESS	the school process is smooth and 'healthy'	there is a clear relationship between process and outcomes.
STRATEGIC CONSTITUENCIES	all the powerful constituencies are at least minimally satisfied.	the demands of the powerful constituencies are compatible and cannot be ignored.
LEGITIMACY	it can survive as a result of engaging in legitimate activities.	the survival and demise of schools must be assessed
ORGANIZATIONAL LEARNING	it can learn to deal with environmental changes and internal barriers	the school is new and developing, or the environmental change cannot be ignored.

Adapted from Gaziel (1996, p. 480).

In contrast to the varying stakeholders' rating of various school effectiveness factors and their related models reported by Gaziel, researchers tend to follow the 'goals' model. Clark, Lotto and McCarthy (1980) view school success "as positive changes in any one, or a combination, of the following four variables: 1) student achievement, 2) student attitudes toward the school or themselves as learners, 3) teacher attitudes toward the school or students as learners, 4)

community/parent attitudes toward the school” (p. 467), a definition which could allow academically successful schools to be compared to schools where the students feel good, even if they do not learn the required materials. Erickson and Carl (1982) offer a similar definition, though one not so specific. They say, “an effective school is one in which essentially all of the students acquire the basic skills and other desired behavior within the school” (p. 7), such as literacy and mathematics competence, as well as problem solving and social skills, whereas Hartwell and Vargas-Baron (1998) propose an idealistic “concept of quality that is not based on how well a few succeed, but rather on how well all succeed. Quality, thus, is attained when ALL succeed in learning, according to their learning styles and abilities, not just those who are judged in traditional terms to be the most able” (p. 10). All of these definitions differ from that used by many of the first studies of school effectiveness, which usually limits effectiveness to student results on standardized exams, particularly in math and reading (Murphy, Hallinger and Mesa 1985; Cuban 1983).

Definitions of school effectiveness in the Third World have been dominated by the researching agents – almost invariably foreign development aid organizations or financed by them. Looking at Gaziel’s list of models, one has to wonder whether the researchers define effectiveness based on the ‘goals’ model, as do the bulk of academic researchers in the U.S., or on the ‘internal process’ model, or even on the ‘strategic constituencies’ model of effectiveness. A lack of agreement about the definition of effectiveness could be the result of the model of effectiveness implicit in their research.

So rather than using a predetermined definition of effectiveness, one which may not be the same one as the various collaborators used for the research, the paper will allow each of the groups to use their own implicit definition of school effectiveness and will attempt to make them explicit.

School climate

School climate is defined as the composite of norms, expectations, attitudes and beliefs of the school community as reflected in the ecology, milieu, social system and culture.

This definition borrows from the earlier writing on school effectiveness. For example, Brookover, Beady, Flood and Schweitzer (1979) define school climate as a “composite of norms, expectations, and beliefs which characterize the school system as perceived by

members of the social system”, while Erickson and Carl (1982) are more specific, saying “school learning climate refers to the attitudinal and behavioral patterns in a school which impact on the level of achievement. This includes such factors as teachers’ expectations for and evaluations of students’ learning, academic norms, students’ sense of futility with respect to learning, role definitions, grouping patterns, and instructional practices” (p. 24). More recently, Shann (1999) cites Anderson (1982), who “conceptualized [school] climate as a summary concept which includes four components: the ecology (physical and material aspects); milieu (presence of persons and groups); social system (patterns or rules of operating and interacting); and culture (belief systems, attitudes, values, norms, and meaning reflected in behavior)” (p. 392).

Ellis (1988), on the other hand, argues that “school climate is a popular metaphor for a complex phenomenon that is easy to perceive but formidably difficult to define, measure, or manipulate” (p. 1).

Considering the qualitative aspects of the current research proposal, Anderson’s categorization of four components appears very useful for organizing the data collection in this important, but “formidably difficult” concept. Accordingly, the definition of school climate borrowed most heavily from Anderson.

Student outcomes

Student outcomes are defined as what society wants children to know when they leave school, the “learning achieved – knowledge, skills, behavior, and attitudes...” (World Bank 1980). These desired knowledge, skills, behavior and attitudes form the criteria for student advancement from year to year. Students who demonstrate their mastery of the required materials are permitted to advance while those who have not mastered the material are retained in the belief that they need more teaching in order to master the requirements. Repetition rates, therefore, are one measure of how effective a school is in getting its students to meet the requirements.

Teacher effectiveness

Teacher effectiveness is the ability of the teacher to produce desired student outcomes. Anderson (1995) defines teacher effectiveness as the influence teachers have on their students, which is a broader definition than used for this paper since it could be construed to include

negative influences. In this study, expected student outcomes are student learning of required materials as is reflected in low repetition rates, an indicator of school effectiveness and the unformalized expectations of parents.

Teaching practices

Teaching practices are the teacher-initiated strategies, procedures, activities and classroom rules intended to cause student learning.

Rugh (1992) pragmatically defined teaching practices as “a set of strategies, procedures, activities, and rules that are teacher-directed for the purpose of ensuring the optimum level of students' opportunity to learn” (p. 6), and her definition forms the basis of the working definition for this paper. The major difference is that the word teacher-initiated replaces teacher-directed. The change was made to allow the definition to include indirect teaching and learning situations created by the teacher but which are not actively directed by the teacher.

1.8. Summary and Brief Overview of the Chapters to Follow

This section has described the context of elementary education in Cape Verde, including tracing the historical developments of the formal school system. The lingering problem of school failure – wastage – is explained, using repetition rate data as well as specific results on final exams. The importance of the problem is explained and documented. The objective of the study and the major research questions are presented. Following this, certain important terms are defined.

Chapter 2 begins with a review of the relevant literature, starting with discussing selected significant studies in some detail followed by summaries of research in the developed world, principally the United States. The limited information on effective schools in Africa and the rest of the developing world is then discussed. Next, a theoretical framework based on the literature is presented which is used as the foundation of the study. The third chapter outlines the methodology used for gathering and analyzing data. Finally, limitations of the study and expected results are also discussed. The final two chapters present the findings and discuss implications for further research and for efforts to improve elementary schools in developing countries.

2. Review of Related Research

Chapter two reviews relevant literature on school effectiveness studies starting with a focus on a few key studies and followed by an analysis of previous reviews and summaries of the voluminous U.S. literature. The literature available on school effectiveness in Africa and the developing world is then reviewed. In addition, the domestic U.S. and international U.S. research are compared and conclusions discussed. Finally, a general theoretical framework of school effectiveness research is presented.

2.1. School Effectiveness in the United States and other Developed Countries

School effects and school effectiveness research is generally regarded as having begun in the United States with Coleman et al's (1966) report on inequality in American schools (Austin 1979, Ralph and Fennessey 1983, Rutter 1983, Cohen 1983, Purkey and Smith 1983, Huber 1999) and in Britain with Rutter et al (1979) (Reynolds 1996, Huber 1999). Coleman et al's report, and others which followed (Jensen 1969, Jencks et al 1972, Averch et al 1972), were widely interpreted to mean that difference between schools did not make a significant difference in student outcomes (Clark et al 1984), and socioeconomic background was the biggest determinant of a student's success in schooling (Coleman et al 1966, Jensen 1969, Jencks et al 1972, Averch et al 1972).

There was a strong reaction to this interpretation and researchers set out to disprove the assertion that schools made little difference. Researchers set out to prove that schools did have effects on their students. This body of work is often called school effects research. The strategy used was to identify schools which produced student outcomes better than expected based on socioeconomic background of the students, typically as measured by standardized tests. The reasoning was that if schools could be found that did produce better than expected results, then research which indicated schools did not make a difference was wrong and poor students, particularly poor, urban black students, could succeed in school. They did find schools which performed better than would be expected based on the socio-economic status (SES) of their students and termed the schools they identified 'effective' or 'instructionally effective'. Early pioneers in this effort include Weber (1971); Lezotte, Edmonds, and Ratner (1974); State of New York Office of Education Performance Review (1974); Frederiksen (1975); Swanson (1976); Edmonds and Fredericksen (1978); Brookover and Lezotte (1979); and Edmonds (1979). Research then changed focus to try to identify what characteristics these schools had which made them more effective, and school effectiveness research was born.

Many early school effectiveness studies used similar methodology to the school effects research. Theoretically basing their research on a factory-style 'input-output' model, large data sources of such quantifiable information on school attributes, such as physical facilities, library books, teacher-pupil ratios, school size, teacher characteristics, were statistically analyzed to see which of these attributes correlated with improved student test scores, generally reading and math (Murnane 1981). Frederickson (1975), for example, reexamined the data base used by Coleman et al (1966), and determined there are at least 55 effective schools in the Northeast quadrant of the EEOS (Education Equal Opportunity Survey). Klitgaard and Hall (1973) analyzed six data sets in a search for effective schools. They focused on finding outlier schools, schools at the ends of the 'bell curve' in terms of student achievement. They report that overachieving schools made up between two and nine percent of the various samples.

Criticism quickly emerged on both the methodology – the quantifiable information on inputs “does not provide information about the behavioral responses of teachers, students, and families” (Murnane 1981, p.19), for example – and the model, which resulted in more sophisticated studies using multiple methods and the addition of process factors to the basic input-output model (Teddlie and Reynolds 2000).

The Weber (1971), State of New York (1974), Phi Delta Kappa (1980), and Sizemore (1983) studies are noteworthy in that they took different methodological approaches rather than the predominant quantitative one.

Focusing on process aspects of schools, Weber (1971) conducted case studies of four inner-city public schools which had successful scores on reading tests. Weber's study is pioneering in school effectiveness research in that it utilized both quantitative and qualitative methodologies. Weber focused on inner-city schools “attended by very poor children” (p. 5). Student achievement, the criteria for identifying effective schools, was measured by a researcher-made, 32 item exam testing reading comprehension administered to 3rd graders (because that usually marks the end of “beginning reading instruction” (p. 6)) in 17 inner-city elementary schools. A school with successful reading achievement was considered to have achieved a national grade norm score as a median plus having a low percentage of gross failures (p. 5). The seventeen schools were then visited by the researcher for two to three days between January and June, 1971, during which time Weber observed reading and remedial reading classes and interviewed

the principal, other administrators, teachers and reading specialists, plus in some cases other personnel such as psychologists and teachers of ESL. This process yielded four schools as being effective at teaching reading to a level that is approximately that of typical average-income schools and substantially better than typical inner-city schools. These four schools became the focus of case studies.

His logic is that “the mere fact that a successful school is doing something different from unsuccessful schools does not mean that the different practice is the cause of success. The matter is made more complicated because successful schools always seem to do many things differently. Which of these different practices are responsible for the higher pupil achievement? It is, of course, impossible to be certain, but it seems reasonable to assume that when all four successful schools are following a practice not usually found in unsuccessful inner-city schools, that practice has something to do with their success” (p. 25). He identified “eight factors that are common to the four successful schools that are usually not present in unsuccessful inner-city schools. These are – not in the order of their importance – strong leadership, high expectations, good atmosphere, strong emphasis on reading, additional reading personnel, use of phonics, individualization, and careful evaluation of pupil progress” (p. 25-6). Furthermore, he reports “small class size, achievement grouping, high quality of teaching, school personnel of the same ethnic background as the pupils’, preschool education, and outstanding physical facilities” (p. 30), features commonly thought important to achievement, are not common to these four schools.

The State of New York Office of Education Performance Review (1974) studied a match pair of two schools serving similar low SES student populations but whose results on standardized reading tests differed. The schools were studied for two and a half months using primarily qualitative methods to try to discover why the reading test scores differed. Formal interviews were conducted with the district superintendent, the district reading coordinator, a bilingual specialist, the principals, assistant principals, and twenty-five classroom teachers. “The opinions of school personnel, community members, and students were elicited both formally and informally. School processes and climate were assessed through frequent observations” (p. 19). In addition, informal interviews were conducted with parents and students. Sample selection was through statistical and demographical comparison followed by visits and the application of specific tests on a limited number of randomly chosen students from each of the

two schools since there was near universal criticism of the validity and reliability of the state-mandated reading tests initially used for sample selection.

In their findings, they report, “School A differed from School B in two major aspects. It had identified reading as a significant school problem and had developed a coherent plan of action to provide leadership to classroom teachers, while School B had not. School A had also succeeded in creating an atmosphere in which learning could take place, while School B had not. Administrative behavior, policies, and practices appeared to account for both of these differences. Therefore, the quality and attitude of the administration seemed to be the only real difference between the schools” (p. 63).

The Phi Delta Kappa (1980) study was a combination of three methodologies: case studies of eight schools, an analysis of secondary sources, and interviews with experts in the field of school change and school effectiveness. They focused on improving or declining schools, in terms of student results on standardized tests, rather than labeling a school as being effective or not. Their logic was that since data on school achievement tends to be historical, the conditions being studied may be different than those which produced the outcomes measured by the data.

The case studies utilized self studies of retracing the history of the school using a “Critical Incidence” technique in an attempt to identify changes which led to the school’s exceptionality – a “retrospective reconstruction of events or incidents that by logical inference related to ...improvement” (p. 3) – a focus on past change. A sample was selected by contacting eight Midwestern urban school districts and asking them to contribute a case history of an improving elementary school. Research teams and schools were designated by the district, so selection criteria are not specified in all cases. One school was selected on the basis of the following criteria: strong administrative leadership, faculty stability, serves a diverse school population, achieves above expected levels on standardized test scores, and is “a place where things are happening to and for kids” (p. 8), while another used strictly standardized test scores as the determining factor. At a planning conference before the researchers were sent to the field, Daniel Levine and Wilbur Brookover made a presentation about new findings and provided a syntheses of research on urban elementary education in the literature to the research teams, a presentation which may have influenced what they looked for and therefore the outcomes.

The quality of the case studies is difficult to assess since only some of the researchers report the methodology used. For example, one school reportedly interviewed 14 teachers, four former staff members, seven parents, one assistant superintendent, one area coordinator, and two building consultants, plus administered a questionnaire to 96 parents, 67 students, and 14 teachers. Another school reportedly interviewed staff and central office personnel while the teachers were given training in conducting parent interviews. In addition, questionnaires were given to all staff and parents. Other schools did not report any details of their methodology.

An analysis of previously published studies was the second part of the Phi Delta Kappa study. Studies were located in ERIC (1966 to 1979), DATRIX dissertation abstracts (1970-1979), *Educational Index* (1996-1979), program abstracts of the American Educational Research association (1976-1978), Smithsonian Information Exchange, and citations and references in the studies selected from the other sources. The following criteria were used for selecting studies for analysis:

- The study must relate one or more of the independent variables of the present inquiry to one or more dependent variables in an urban school setting.
- The study must represent an attempt at systematic inquiry (i.e. the investigator must present some evidence on an outcome measure).

Approximately 1,200 articles were identified as potential data sources, which were sorted into two categories, case studies featuring single schools or school districts and research studies featuring multiple schools in multiple districts. Those that did not fit were discarded, resulting in 253 case studies and 515 research studies. Eighty-six case studies were aggregated. The rest were eliminated because they did not provide evidence on at least one of the independent variables under study (leadership, personnel, financial allocations, curriculum and instruction, resources and facilities, and community interaction) in relation to a positive change in one or more of the dependent variables (student achievement, student attitudes toward school, student self-concept, teacher attitudes towards students, teacher morale, and community/parent attitudes toward school), did not employ systematic inquiry techniques, focused on non-school factors, had an overly narrow emphasis (subprograms within the school), or concentrated on non-elementary or specialized elementary student groups. Over half of the case studies were reports to sponsoring agencies, most likely program evaluations since most of the case studies involved direct interventions aimed at school improvement through manipulation of one or more variables.

It is interesting to note that only studies which tended to reinforce contemporary thinking on school effectiveness (the independent variables under study) were selected, a process which may have tended to reinforce conventional thinking. However, unlike many other studies of the time, the measure of student outcomes was quite flexible and not merely student achievement on standardized reading or math tests.

For the third phase of the study, experts (urban school researchers, change agents, and policy makers) were called upon to provide their opinions. The individual experts were selected on the basis of multiple references and citations in the research and case study literature. Of an initial group of 25, 11 persons were actually interviewed. The interviewees were selected on the basis of the diversity of their backgrounds and experiences rather than their similarities, i.e., an effort was made to interview people involved with urban school improvement from a variety of perspectives rather than multiple individuals from a single perspective. The perspectives presented in the study are:

- the federal perspective (three individuals), which tends to view urban school effectiveness from a ‘top-down’ position as policy makers and program administrators;
- the change agent perspective (three individuals), which are people who work in the schools to effect positive change and are concerned with urban school improvement locally; and
- the social scientist perspective (five individuals), which is from people with no real stake in effecting urban school improvements – outsiders looking in.

The interview schedule used to collect the data was organized around five major areas:

- 1) instances of exceptionality in urban schools
- 2) evidence of exceptionality (dependent variables)
- 3) causes of exceptionality (independent variables)
- 4) potential generalizability of exceptionality to other urban schools
- 5) policy planning implications.

Finally, the three parts of the study were “compared and synthesized into a set of 12 generalizations that summarize what is known about causes of exceptionality in urban elementary schools” (p. 203), as follows:

Leadership

- 1) The behavior of the designated school program leader is crucial in determining school success.
- 2) The leader's attitude toward, or philosophy of urban education and expectations for school or program success determine the impact of the leader on exceptional schools.

Teaching Personnel

- 3) Successful schools and programs frequently utilize staff development or inservice training programs to realize their objectives.
- 4) The greater the specificity or focus of the training program in terms of goals or processes, the greater the likelihood of its success.
- 5) Reductions in adult/child ratios are associated with positive school performance.

Finance

- 6) Successful schools and programs are often supported with special project funds from federal, state, and local sources.

Resources and Facilities

- 7) Resource and facility manipulations alone are insufficient to affect school or program outcomes.

Curriculum and Instruction

- 8) Successful urban elementary schools and programs are characterized by clearly stated curricular goals and objectives.
- 9) Structured learning environments are particularly successful in urban classrooms.
- 10) Successful urban schools and programs frequently employ techniques of individualized instruction.
- 11) Success in urban schools, classrooms, and programs appears unrelated to any particular curricular organization, e.g., open classrooms, homogeneous grouping, or any particular instructional strategy, e.g. programmed instruction, language experience approach, etc.

Community Resources

- 12) Successful urban schools and programs are characterized by high levels of parental contact with the school and parental involvement with school activities.

In another groundbreaking study, Sizemore (1983) explicitly applied organizational theory to analyze internal school processes. In the study, three high achieving elementary schools with predominantly poor and black student populations were selected based on student results on standardized reading and mathematics tests. An ethnographic approach to research was used,

with research techniques including nonparticipant observation and study of documents, as well as administration of questionnaires, which were analyzed using cluster analysis. An innovation in Sizemore's study was the application of a model of an explicit organizational theory to examine school routines, rather than the unstated organizational model used by most of the earlier research on effective schools where the "presiding general is the strong principal leader"(p. 5). The study utilized the Organizational Process Model taken from Allison (1971), *Essence of Decision: Explaining the Cuban Missile Crisis*, focuses on goals, processes and procedures. It is organized around:

- 1) the actors, their factored problems and fractionated power, their parochial priorities and perceptions, and their collective action characterized by the goals and their constraints on acceptable performance;
- 2) sequential attention to these goals;
- 3) standard operating procedures grounded in the incentive structure of the organization, in the norms of the organization, or the basic attitudes and operating style of its members;
- 4) the programs and repertoires which become more complex with larger numbers of individuals;
- 5) uncertainty avoidance;
- 6) problem-directed search (p. 35).

The study utilized qualitative methodologies. Each principal was observed for two school weeks. Semi-structured interviews were conducted with principals, teachers, and parents. Each teacher was given one questionnaire and one goals inventory. Cluster analysis was used to analyze the questionnaires. Parents received questionnaires, though the return rate was poor in two of the three schools. Data was analyzed using the Constant Comparative Method of Qualitative Analysis, taken from Glaser and Strauss (1967), *The Discovery of Grounded Theory*, which calls for comparing incidents applicable to each category, integrating categories and their properties, delimiting the theory, and writing the theory (Sizemore 1983, p. 37).

Sizemore reports that success begins with the selection of a moderately authoritarian principal who generates a climate of high expectations for student performance, mobilizes consensus around achievement as the highest priority, chooses functional routines, and is willing to disagree with superiors regarding these matters. The most important functional routines are:

- 1) assumption of responsibility for student discipline, attendance, and parental conflict through publication of procedures enforced by selective sanctions;
- 2) close contact with and supervision of teachers and staff;
- 3) consistent monitoring of students' skill mastery;
- 4) involvement of parents as an instructional support group;
- 5) establishment of the school office as a central command post;
- 6) use of skill mastery grouping as a means of placing students in self-contained classrooms modified by nongrading and team teaching;
- 7) expansion of the school day by using subject, preparation, and after-school periods for reinforcement;
- 8) refusal to place students in classes for the retarded until other alternatives have been exhausted;
- 9) refusal of additional programs which would consume regular school time.

By the mid 1980's, a five-factor effective schools model had emerged, as follows:

1. Strong leadership;
2. High expectations for students;
3. Orderly, pleasant environment;
4. Strong emphasis on pupil acquisition of basic reading skills;
5. Careful and frequent evaluation of student progress.

These five factors became the core of the effective schools model.

Numerous other studies followed, but rather than detail them all this section will focus primarily on previous reviews and summaries principally with respect to the five factor effective schools model.

Purkey and Smith (1982, 1983) reviewed the early body of literature on school effectiveness and after expressing "reservations about the available research and writing on school effectiveness, ...nevertheless find a substantive case emerging from the literature" (1982, p. 67) which argues that some combination of specific factors do contribute to a school's effectiveness. They divide the literature into four categories: outlier studies, which focus on statistically determined highly effective and ineffective schools; case studies, which generally look at urban elementary schools; program evaluations, which look at school-level variables

affected by a variety of programs; and other studies, such as one comparing public and private secondary studies and NIE's 1978 *Safe School Study*.

In the end, they divide their description in terms of structure, process and climate of values and norms. Included in their list of 13 effectiveness variables (1983, p. 443-444) are three of the five core elements of the model, namely, strong leadership; high expectations for students; and an orderly, pleasant environment. Missing from their list are strong emphasis on basic reading skills and careful and frequent evaluation of student progress, although it could be argued that Purkey and Smith's variable "curriculum articulation and organization" covers the same idea as emphasizing basic skills while their variable "school-wide recognition of academic success" implies that student progress is measured. In addition to the above-mentioned factors, they identified other factors attributed to school effectiveness in the literature they reviewed, including school-site management, staff stability, school-wide staff development, parental involvement and support, maximized learning time, and district support in the category of structural variables. For process variables they report collaborative planning and collegial relationships, and a sense of community within the school to be important variables in school effectiveness.

Ralph and Fennessey (1983) in another review of the literature, produced a similar list of characteristics, though they make the observation that "the characteristics vary" (footnote p. 694) in the lists of school characteristics published in the various studies reviewed. That is perhaps an understatement, particularly if one considers the variety of terminology used to describe effective school characteristics (sometimes called variables, correlates or factors, to add to the confusion).

In 1984 the Northwest Regional Educational Lab published its list of effective schooling practices as a summary of the relevant research, with the general comment that:

The school is more than a collection of people, subjects and grade levels. The qualities of the school as a whole can either enhance or detract from the classroom environment. Clear expectations, consistency and collaboration among adults, strong instructional leadership and a central focus on learning are all important in pursuing instructional effectiveness (p. 7).

The Northwest Regional Educational Lab (1984) organized its findings into three areas: Teacher characteristics and practices, school characteristics and practices, and district characteristics and practices. This three-level approach is a broader one than that which formed the basic five-characteristic model. However, looking at the school characteristics and practices, all five characteristics of the basic model are included, as are all the additional ones reported by Purkey and Smith, plus a few more. These school-level effectiveness factors are basically matched by equivalent characteristics at the classroom and the district levels.

Brookover (1985) likewise analyzed the body of literature and produced his own version of an effective school. Included in his list of characteristics are all five of the basic elements, plus more. He presents his findings in three categories: the ideology of the school, the organizational structure of the school, and the instructional practices of the school, as follows:

1) Ideology of the School:

- The staff has high expectations and believes that all children can learn, teachers can successfully teach, standardized tests are appropriate goals and measures of school success, and the school is committed to producing high achievement for all students – no matter what it takes;
- Students believe they can learn.

2) Organizational Structure of the School:

- Role expectations are defined in terms of achievement: an ‘effective teacher’ is one who instructs all students to high achievement, a ‘good student’ is a high achiever, an ‘effective principal’ is an instructional leader who promotes effective instruction and high achievement for all students.
- Reward structures are centered on achievement, whereby teachers are recognized and rewarded for producing high achieving students, students are recognized and rewarded for high achievement and improved performance, and the principal is recognized and rewarded for promoting a high achieving school in which all students master instructional objectives.
- Stratification of students is minimal, meaning flexible heterogeneous grouping is used, compensatory education and special education programs function to help students ‘catch up’ and are conducted in and coordinated with the regular classroom.
- Differentiation of the instructional program is minimal. Common instructional objectives are established for all students, common expectations are set for all

students, common instructional materials are used for all students, and common role definitions are stated for all students.

- Parental support and involvement are structured by the school to facilitate the school's achievement goals.

3) Instructional Practices of the School:

- School goals and instructional objectives: school goals, standards for mastery of instructional objectives, and instructional objectives are all clearly stated and reflect the school's goal of mastery of basic skills by all students;
- An effective program of structured direct instruction;
- An orderly, relatively quiet, work-oriented atmosphere is established;
- The instructional program results in a high percentage of the total school day being used as 'academic engaged time' for all students;
- Academic group competition is used to promote peer learning and motivation
- Reinforcement principles are employed;
- Assessment data are used effectively to monitor ongoing student progress, mastery of objectives records are accurately kept, diagnostic information is utilized in planning corrective instruction, school-wide data is used to improve school's instructional program.

McCormack-Larkin (1985) synthesized a model for effective schools from research, literature and reported practices of effective schools. The five basic characteristics are included in their model, along with many more. For McCormack-Larkin, academic mission, high expectations, professional collegiality and recognition of excellence are all part of the school climate.

Curriculum further articulates expectations and lays out monitoring of student progress and this information is communicated regularly to parents. Detailed expectations for teachers' classroom performance are laid out. Further important characteristics according to McCormack-Larkin, include a support system to help slower students, and strong parent and community support for the school in general.

Murphy, Hallinger and Mesa (1985) also reviewed the literature and provide their own interpretation in producing a list of essential characteristics of effective schools: Their schematic has two main parts, school technology and school environment. Among the many characteristics listed under the category school technology, instructional leadership and evaluation of student progress are included. In the category school environment, high

expectations and safe, orderly environment are included. The only one of the five characteristics not listed is strong emphasis on basic reading skills. However, like McCormack-Larking, Murphy et al also mention the importance of parental involvement and support.

Walberg (1986), in his summary of research by a team of outside scholars sponsored by the U.S. Department of Education, identified the following five characteristics of effective schools, which are nearly identical to the Hawkins-Stafford School Improvement Act:

- strong instructional leadership;
- safe and orderly climate;
- school-wide emphasis on basic skills;
- high teacher expectations for student achievement;
- continuous assessment of pupil progress.

In one of the more recent reviews, Daniel Levine (1990), one of the earlier writers on school effectiveness, reviewed the literature and derived a theory of school effectiveness based on seven main categories of characteristics: productive school climate and culture, focus on student acquisition of central learning skills, appropriate monitoring of student progress, practice-oriented staff development at the school site, salient parental involvement, effective instructional arrangements and implementation, and high operationalized expectations and requirements for students. These include all five of the basic characteristics, either at this level or in the characteristics Brookover details. He also includes a final category of characteristics, which he calls other possible correlates.

Most of these reviews of the American literature include their own lists, among which there is a great deal of variety but a lot of commonality as well, particularly with regard to the basic five-characteristic model. Indeed, a comparison of 14 different summaries or reviews (Levine 1990, Walberg 1986, Brookover 1985, McCormack-Larkin 1985, Murphy et al 1985, Northwest Regional Educational Lab 1984, Cohen 1983, Joyce et al 1983, Purkey and Smith 1983 and 1982, Ralph and Fennessey 1983, Rutter 1983, Sweeney, James 1982, Clark et al 1980, and Austin 1979) produced nearly 100 different characteristics or different terminology for similar characteristics (see Appendix B for the complete table).

One reason for this great number of characteristics is that certain reviewers focused on different levels of the educational process. Some reviewers focused on school level factors, while others included classroom practices, and still others offered observations on system-wide factors. Frequently authors analyzed school effectiveness characteristics on two of the levels while some included elements of all three. In addition, the level of detail is also not consistent between the reviews. Furthermore, there is no standardization of terminology allowing for easy analysis.

“Fuzzy” language -- as Larry Cuban (1983) describes it -- aside, there is a great deal of agreement in the reviews surveyed. Of the 100 school effectiveness characteristics listed in all the reviews analyzed in this paper, two or more reviews agree on 31 of them, while at least half agree on the following eight items:

- 1) administrative and instructional leadership (13 reviews);
- 2) high expectations for students (also staff, though not cited as frequently) (12 reviews);
- 3) clear mission, goals and objectives for students and the school (11 reviews);
- 4) orderly environment or effective discipline (10 reviews);
- 5) maximized use of time for learning (10 reviews);
- 6) monitoring of student progress (10 reviews);
- 7) parental involvement (9 reviews);
- 8) school-wide recognition of positive performance (7 reviews).

That there is agreement across the reviews should be no great surprise considering the authors were all reviewing basically the same relatively limited number of studies in the United States.

Agreement is not strictly limited to studies conducted in the United States as there is some degree of agreement when studies from other countries are also compared. Three reviews from England (Mortimer et al 1988, and Sammons et al 1995, Reynolds et al 1996) show great similarities to the results from the United States. A comparison of the four reviews, summarized in the table below, shows that the three more recent reviews, Mortimer et al (1998), Sammons et al (1995) and Reynolds et al (1996) to be nearly identical to the meta analysis of US reviews of the effective schools literature. An interesting difference is that two reviews (Sammons et al 1995 and Reynolds et al 1996) both cite pupil rights as a characteristic of school effectiveness, something that does not appear in the U.S. literature. One explanation for this could be that the British research does not have the focus on primary schools as is the

case in the United States. In elementary schools, students are generally not given positions of responsibility within the school nor do they participate in many out-of-school activities, two cases cited in support of this characteristic (Reynolds et al 1996, pp. 142-143). Terminology may differ, as within the US literature, but in general the British reviews confirm the same characteristics of school effectiveness.

US Reviews (meta analysis)	Mortimer et al 1988	Sammons et al 1995	Reynolds et al 1996
Administrative and instructional leadership	<ul style="list-style-type: none"> ◆ Goal-oriented leadership from the school principal ◆ Participation and engagement of the assistant principal 	Professional school administration	Professional leadership
High expectations for students (also staff, though not cited as frequently)	Intellectually challenging teaching	High expectations	High expectations
Clear mission, goals and objectives for students and the school	Common educational philosophy in the faculty	Sense of community and common goal-orientation in the faculty and the entire school	Shared visions and goals
Orderly environment or effective discipline	<ul style="list-style-type: none"> ◆ Positive school climate ◆ Learning-oriented atmosphere 	Positive learning atmosphere	A learning environment
Maximized use of time for learning		Importance placed on teaching and learning	High quality teaching and learning
Monitoring of student progress	Continual documentation of student progress	Frequent evaluation of student progress and of the school as a whole	Monitoring pupil progress
Parental involvement	Inclusion of the parents	Involvement of parents in school life (seen as partners)	
School-wide recognition of positive performance.		Positive reinforcement	Positive reinforcement

Agreement on school effectiveness characteristics, however, does not always extend beyond the “Anglo-Saxon world” (Scheerens and Creemers 1996, p. 181). Reporting on school effectiveness research in the Netherlands, Scheerens and Creemers (1996) relate how early studies in the Netherlands “started with the replication of studies carried out in the United States with the intention to confirm these results or at least to find some empirical evidence for the so-called ‘five-factor model’”(p. 181). They report that educational leadership by the principal was not found to be an important factor in school effectiveness such as was consistently found in the U.S. or the vice principal in the U.K. More recent research, on the other hand, does indicate some relationship between educational leadership in schools and student outcomes. Other factors, namely structuring of instruction, evaluation of pupil

progress, maximizing teaching/learning time, and positive learning environment did appear to correlate with effective schools in the Netherlands. Scheerens and Creemers (1996) analyze 42 studies, 29 of which are from primary schools and 13 from secondary schools, in comparison to 10 school effectiveness variables and note the number of studies which correlated significantly with each of the variables. Interestingly, negative correlations were often found. Their table is reproduced below:

	Primary level		Secondary level	
	positive association	negative association	positive association	negative association
Structured teaching/ feedback	5		1	
Teacher experience	3	1		1
Instructional leadership		2	1	
Orderly climate	2		3	1
Student evaluation	5		0	
Differentiation		2	0	
Whole class teaching	3		0	
Achievement orientation	4		4	
Team stability/ cooperation		3		3
Time/ homework	4		4	
Other variables	16		8	
Number of studies	29		13	

Adapted from Scheerens, Jaap and Bert P. M. Creemers (1996, p. 187).

They conclude that “the factors that ‘work’ in Dutch education” (p. 187) do not confirm “the effective schools model”, pointing out that “the two conditions thought to be effectiveness enhancing that are found to have a significant positive association with the effectiveness criteria in primary education (structured teaching and evaluation practices), are found in no more than 5 out of 29 studies. ...It is also striking that if an effect of instructional leadership and differentiation is found, it is negative” (p. 187).

In respect to the research on school effectiveness in the Netherlands, Gray (1993) points out that “the Dutch literature is heavily oriented toward sophisticated correlational models, with a peculiar lack of case studies.” A more complete body of literature appears to be called for before concluding that the school effectiveness factors in the Netherlands are different from

those in the U.S. and the U.K. Nonetheless, Scheerens and Creemers show that school effectiveness research findings do not automatically transfer from one context to another.

Effective schools research is not limited to the U.S., U.K. and The Netherlands. Teddlie and Reynolds (2000) compared two reviews, one in the United States and one in Britain, “each of which refers to several hundred studies of effective schools characteristics, and each concentrates upon rather different knowledge bases... [with] only approximately 4 per cent of references out of the total cited by both reviews [being] the same” (p. 141). The comparison cross-indexes 16 factors commonly used in quantitative analysis of school effectiveness against eight countries, two of which have two dominant national cultural groups. The table is reproduced below.

Table 2-1 International Comparison of School Effectiveness Variables

Predictor Variable*	Country										
	Belgium (Fl)	Belgium (Fr)	Canada (BC)	Canada (Ont)	Finland	France	Hong Kong	Hungary	Israel	Japan	Luxembourg
Father's occupation	m	m		p	p	p		p	m		
Father's education									p		
Level of expected further education	p	p	p	p	p	p	p	m	p	p	p
Homework			n				p	p	p	p	
Teacher experience					p	p					p
Time spent keeping order		n			n	n					
Time spent on teaching	p						p				
Teacher expectations			p	p	p	p	p	p	p		p
Use of published tests			p		p			p			
Use of own tests							n				
Opportunity to learn	p	m		p		p	m		p	p	
Class size	n	p			p	p					
Urbanization		p					m	p			
Number of female teachers	p										n
Number of male teachers	p							p			

* Predictor Variables with significant Positive (p) or Negative (n) Associations with Mathematics Achievement
 Note: School and classroom variables are corrected for father's occupation or father's education – when a predictor variable was not measured in a country this is indicated by the letter m.
 (Adapted from Teddlie and Reynolds 2000, p. 238)

Analysis of the table shows that common characteristics in the studies include: Level of expected further education, teacher expectations, and opportunity to learn are three characteristics found to positively correlate with student achievement in more than half of the cultures surveyed, whereas teacher experience and use of published tests were also found to correlate in three studies. It is interesting to note that use of published tests was found to correlate positively with student achievement in British Columbia, Canada but not in Ontario, Canada, with the reverse being true for the characteristic opportunity to learn.

Teddlie and Reynold’s comparison yielded the following common process factors and a subset of related components for each (p. 144):

Table 2.2: Teddlie and Reynold’s Comparison of U.S. and U.K. Studies

Process	Components of the Process
1. The Processes of Effective Leadership	<ul style="list-style-type: none"> a. Being firm and purposeful b. Involving others in the process c. Exhibiting instructional leadership d. Frequent, personal monitoring e. Selecting and replacing staff
2. The Processes of Effective Teaching	<ul style="list-style-type: none"> a. Maximizing class time b. Successful grouping and organization c. Exhibiting best teaching practices d. Adapting practice to particulars of classroom
3. Developing and maintaining a pervasive focus on learning	<ul style="list-style-type: none"> a. Focusing on academics b. Maximizing school learning time
4. Producing a positive school culture	<ul style="list-style-type: none"> a. Creating a shared vision b. Creating an orderly environment c. Emphasizing positive reinforcement
5. Creating high (and appropriate) expectations for all	<ul style="list-style-type: none"> a. For students b. For staff
6. Emphasizing student responsibilities and rights	<ul style="list-style-type: none"> a. Responsibilities b. Rights
7. Monitoring progress at all levels	<ul style="list-style-type: none"> a. At the school level b. At the classroom level c. At the student level
8. Developing staff skills at the school site	<ul style="list-style-type: none"> a. Site based b. Integrated with ongoing professional development
9. Involving parents in productive and appropriate ways	<ul style="list-style-type: none"> a. Buffering negative influences b. Encouraging productive interactions with parents

Teddlie and Reynolds’ list of process factors and their components takes into account the different levels present both in processes of effective teaching and within several of the components. They argue that school effectiveness research needs to take into account in-class

factors, such as teacher expectations and time on task, since “it is clear that there are important differences between effective and ineffective schools in the nature of their classroom practices and teacher behaviours” (p. 154). Educational effectiveness research is the name applied to such multilevel research (p. 157), though the authors do caution that these studies should be longitudinal in order to not underestimate school effects (p. 158).

As this section has shown, school effectiveness research has taken place in a number of countries in North America and Western Europe, though by no means all countries. Huber (1999), for example, had to rely on U.S. and British research in his article “School Effectiveness: Was macht Schule wirksam?” Comparisons of the various national bodies of literature reveal a general trend toward common effectiveness characteristics, but, as the case of The Netherlands shows, caution must be taken when attempting to transfer the findings to other contexts.

2.2. Criticism of School Effectiveness Research

Despite its influence on American schooling as reflected in the number of school improvement efforts which have been based on the five-factor effective schools model (Ralph and Fennessey 1983), the school effectiveness literature is not without its critics. Table 2-1 summarizes the criticisms published in six reviews of the literature.

Table 2-3: Criticism of School Effectiveness Research

	Murphy et al (1985)	Cohen (1983)	Cuban (1983)	Purkey & Smith (1983)	Ralph & Fennessey (1983)	D’Amico (1982)	Purkey & Smith (1982)
neglects importance of individual differences among students				x			
lack of attention to content	x	x					
problems in blending related research findings	x						
lack of explanatory models	x						
lack of behavioral indicators	x						
narrow research base	x	x		x	x		x
elementary bias	x	x	x				
urban focus	x						
limited outcome measures	x		x				
reliance on standardized tests	x		x				
lack of clarity in terminology	x		x		x		

over-expansion of the school effectiveness rubric	x			x			
premature application of findings	x						
misunderstanding of leadership	x						
misallocation of effort toward technological factors	x						
failure to view schools as functional organizations	x			x			x
no demonstration of causality		x			x		
few longitudinal studies		x		x			x
little information on sustainability		x					
error in identification of effective schools				x	x		x
inappropriate comparison				x			x
subjective criteria used for determining school success				x	x		
transferability of findings				x			
observer bias					x		
data tampering					x		
surface similarity masks different findings						x	
inconsistent identification of “essential characteristics”			x			x	x
low degree of match between conclusions and specific findings -- lots of interpretation						x	
varied quality of methodology of primary research							x
no systematic sampling of differing types of schools							x

The most common critiques according to the above analysis are as follows:

- Narrow research base. Although there is a lot of literature on the subject, reviews outnumber research and most articles focus on four basic studies whose sample base is fairly small (D’Amico 1982). Furthermore, the standard of comparison was standardized test results (primarily in reading and mathematics), which is a limited measure of what schools are supposed to teach (Cuban 1983). Ralph and Fennessey (1983) note that “the essay-reviews of effective schools have generally attracted more attention than the primary research they summarize. These reviews give the impression that empirical propositions [underlying the effective schools movement] are established facts” (p. 690).
- Studies almost exclusively done in elementary schools. Few studies have been carried out in secondary schools even though the reform movement has adopted the same characteristics as appropriate for high schools. This critique applies more to

the application of the research than to the research itself, though by limiting the research to such a narrow focus generalizability is limited (Purkey and Smith 1982).

- Lack of clarity and standardization of terminology. Larry Cuban (1983) points out that “a half dozen definitions of effectiveness dot the studies. ‘Climate’ is ambiguous. Some people feel the term ‘leadership’ is undefinable” (p. 695).
- Failure to view schools as functional organizations. The implicit assumption is that once the “5 – or 7 or 12 – key features” have been identified, “schools can simply decide to adopt them” (Purkey and Smith 1982, p. 67) in order to become effective. Such an oversimplified approach led to disappointment when the schools did not become effective, though it is more a critique of the application of the research than of the research itself.
- Few longitudinal studies. “It is not clear that the reading scores of a third-grade class in an effective school will look the same when that class is in the sixth or eighth grade. Similarly, it seems reasonable and prudent to expect an effective school to have been so historically before raising the banner of success over its doors. Few studies require schools to be consistently effective” (Purkey and Smith 1982, p. 66).
- Error or bias in identifying effective schools. For simple case studies, the danger of “administrators’ inclination for ‘self-puffery’” is possible when they are called on to nominate an effective school without corroboration with objective data (Ralph and Fennessey 1983, p. 691). Further, sometimes students’ SES was not correctly measured (Ralph and Fennessey 1983), leaving school effectiveness open to the question of student background.
- Inconsistent results. “...Some characteristics deemed ‘indispensable’ by some authors -- for example strong administrative leadership -- are not included at all by the others” (D’Amico 1982, p. 61).

One other critique that did not receive as much attention by these reviews is the troublesome issue of causality. Did the characteristics accredited with the school’s success cause the schools to become effective or did the characteristics result from the schools effectiveness or did some of them cause the school to perform exceptionally well while some are merely the result of that exceptional performance? Clark, Lotto and Astuto address this issue in two ways. First, they bring up mutual causality and cite Weick (1979), who argues that:

When any two events are related interdependently, designating one of those two cause and the other effect is an arbitrary designation. ...In any causal loop no variable is any more or less important than any other variable. No variable in a loop controls other variables without itself being controlled by them (p. 77).

Secondly, Clark et al (1984), in their comparative analysis of the effective schools and school improvement research, point out the striking similarity in the identification of the importance of the principal (or other leader) in both bringing about change and his/her role in shaping a school's climate, one of the frequently cited elements of school effectiveness. This suggests a certain causal relationship between the principal and school effectiveness, meaning the principal can bring about school effectiveness.

2.3. Africa and the Developing World

Compared to the rich body of literature on school effectiveness published in the United States, little literature is available on school effectiveness in Africa and the rest of the developing world. The dearth of published material can be illustrated by looking at the results of searches of the extensive ERIC database. A search with the parameters "Effective Schools Research" and "Africa" returned zero citations from the period 1966 to 1989 and six for the period beginning in 1990. Broadening the ERIC search to include "Effective Schools Research" in all "Developing Nations" yielded a total of eight citations from 1966 on to the present. A search for "Effective Schools Research" and "Developing Countries" yielded 33 citations. Similar results were obtained using related keywords. Considering these search results, it is not surprising that the literature on effective schools research in developing countries is peppered with complaints on the lack of research (e.g. Cohn and Rossmiller 1987, Fuller 1987)

There are several reasons for the relatively small number of published studies. One fundamental reason lies with the motivating force behind school effectiveness research. In the United States the investigation of equity in schools provided the spark. Numerous researchers rose to the challenge posed by Coleman's report. Except very recently in South Africa (Case and Deaton 1997), no such equity issues have been raised in the Third World. Rather than equity, the driving force in school research became a quest for efficiency, with research sponsored largely by donor agencies providing aid to countries in the developing world. On the one hand, they researched school effects to prove that investments in education – a commonly used phrase in the literature – were worthwhile, and on the other hand, to identify

which inputs provided the greatest return on the investments. Efficiency, rather than equity, became the guiding principal for school research in the Third World.

Another reason for the limited amount of research on school effectiveness in developing countries has to do with lack of human and material resources, particularly in Africa. African universities, which would be expected to research their national school systems, have little resources with which to pursue research (ADEA 1998). Bray (1986) offers the low number of Africans with higher degrees and research training as one explanation, pointing out that “research is very time-consuming and laborious, and talented Africans who are suited to research often occupy posts dealing with more urgent administrative or developmental matters. Even university lecturers often do not conduct as much research as is commonly expected of them, partly because they are required for more important leadership and developmental functions. It is not unusual for a university professor to be called upon to serve in an important government ministry” (p. 17). Furthermore, “few books are published by African universities because teachers – constrained by their economic situation – prefer to devote themselves to consultation work sponsored by foreign organizations” (ADEA 1998, pp. 1-2).

Foreign organizations have played an important role in developing countries’ education since the 1960’s when colonial powers were giving up their overseas empires (Cerych 1967, World Bank 1980). “Education sectoral analysis has become a central feature of international cooperation to support African education” (Samoff 1999, p. 250). King (1990) points out that “North-South academic collaboration has for many countries become more dependent on Northern funding over the past 10-20 years”(p. 48), highlighting the financial constraints facing developing countries. Cape Verde, for example, devotes 90% of its educational budget to salaries, leaving very little for construction, textbook provision, and other activities related to expansion or qualitative improvement.

Samoff (1994b) asserts that “by the 1990’s, studies of African education initiated, commissioned, and supported by external assistance agencies may have become more numerous and more influential than studies undertaken by academic researchers...”(p. 23), but they are seldom published (Samoff 1994a) as the ERIC search results testify. ADEA (1998) concurs, saying, “there is a proliferation of teams of consultants who carry out research on a contractual basis” who are sponsored by foreign organizations such as the World Bank, which is the largest financier of education projects in developing countries. Unfortunately, these

projects' research priorities are defined by the foreign organizations (ADEA 1998) and are not intended for academic edification. Indeed, printed in dark bold face on the bottom of the cover of one such report by the World Bank is the warning:

“This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.”

These sector studies (as in education sector, as opposed to agricultural or health sector, for example.) contracted by outside agencies are to a large degree sometimes little more than justification for some project or program (Samoff 1994a) and their circulation is “...so limited that often they remain unknown outside the agency and researchers who conducted the study” (Samoff 1999, p. 250). These sentiments reflect earlier comments by Hurst (1981), who asserts that “evaluations are all too often vindictory and propagandistic, aimed at collecting evidence to show that projects and programmes should be continued and replicated, and that those responsible have been doing a good job, instead of detecting what needs to be done differently in the future, or not done at all” (p. 192).

King (1990) reasons that “[i]n a situation where many countries need ‘educational foreign exchange’ ...more than ever, and where donors are anxious to have greater leverage over their investments, research and evaluation often play a role of confirming and reinforcing investment strategies” (p. 48). It is with the expressed intention of forming policy that the World Bank commissions studies. Alexander and Simmons 1975 publication *The Determinants of School Achievement: The Education Production Function*, a survey of the then available literature (Husen et al 1978), is one example. Stephens (1990) comments, “it is interesting that they [World-Bank sponsored quantitative research] rely so much on survey instruments ...designed principally by economists” (p. 149). Hurst (1981), who worked for the World Bank at the end of the 1970's, argues that “perhaps no more than a few hundred key agency and ministry officials, plus some scores of highly influential academic advisers, form a tightly-knit and inward-looking network which decides the reform agenda for most of the developing world. Thus it is possible for one economist – superbly articulate and well-connected – to be a principal *animateur* of the global infatuation with educational television at one period, and of the subsequent hoo-hah about nonformal education some years later” (p. 191).

Along similar lines, Samoff (1994b) points out that these studies “pay far more attention to finance than learning” (p. 1), such as Tan, Lane and Coustère’s (1997) analysis of inputs in the Philippines. They use an econometric model to compare “the cost-effectiveness of alternative investments for improving educational outcomes” (p. 855). Such a perspective should not be surprising. A World Bank staff member who worked in the primary education department in Washington recently told the author, “We are, after all, a financial institution.”

Sector studies invariably reflect their sponsor organizations’ priorities and policies, which, according to Graham-Brown (1991) “...are half-hearted, self-interested, non-existent or ignored. These policies are made and controlled in the industrialized countries of the North” (p. 304). “From Mauritania to Madascar, the recommendations ...are similar” (Samoff 1999, p. 250). Indeed, Nagel and Snyder (1989), in a 14 year case study of educational development in Liberia, argue that “...international funding of development projects contributes to and sometimes creates some of the most persistent and vexing educational development problems” (p. 7) in part because of changing policies on the part of the donor agencies. The World Bank’s recent reversal of their position recommending parents pay school fees is one case in point. Bray (1986) argues that “international agencies in educational development... have acted as independent initiators and catalysts of major educational policy changes. ...The international agencies should not be assumed to be neutral institutions responding to requests from developing countries and without their own ideologies. Rather, they are heavily dominated by capitalist ideology...” (p. 16). Because of such constraints, the sector studies collectively have a narrow purpose, leaving many aspects of developing countries’ education systems unexamined. Samoff (1994b) laments, “apparently, to date there has been no comprehensive analysis of [research] methodologies, content, findings, recommendations, or influence” of sector studies (p. 4).

This body of research, aside from its general unavailability for scholarly purposes and its focus on return on investment, has three additional drawbacks. The first is that the research methodology is often unclear or unexplained, hiding potential weaknesses which could affect the findings (Samoff 1994b, Teddlie and Reynolds 2000). The second drawback is that because the vast majority of these research papers are not published, they have not been exposed to the scrutiny of scholars, with the result that methodological weaknesses or logical flaws are not revealed, leaving the results unexamined (Samoff 1994b). Gannicot and Throsby (1994) identified a further weakness. “Whilst this research has been influential, it has also

come under strong methodological criticism, especially since the question has been approached almost exclusively not from the consumers' perspective but in terms of what the producers regard as effectiveness"(p. 7). Samoff (1999) asserts,

Though embedded in the rhetoric of partnership and though conducted within Africa, increasingly by African consultants, for the most part education sector studies remain distinctly foreign. That is, those who are responsible for guiding and managing Africa's education systems do not regard these as *their* studies, developed for *their* benefit, and useful in *their* daily work. Those who operate Africa's education systems, from principals and headmasters to teachers, have even less sense of ownership. Students, parents, and communities have none at all" (p. 253).

In a review of 99 education sector studies, Samoff (1994) makes the following observations:

1. A recurring theme is crisis. "Education in Africa, at all levels and in all forms, is in dire straits" (p. 24).
2. National authorities seem unable to respond to the crises in education effectively.
3. Quality of education has "seriously deteriorated in most African countries. In these documents, that generally means that examination scores and teachers' qualifications have declined" (p.25). This last sentence is particularly noteworthy because it shows that for most of these studies teacher quality is equated with official teacher qualification, such as certificates, something for which numerical data exists or can be obtained. However, qualified teachers are not uniformly quality teachers, a fact which reveals a weakness in the large-scale quantitative research. Improvement efforts emphasizing solely official qualification could lead to goal-displacement where an official qualified teaching force becomes the goal instead of a teaching force of high quality.
4. Most of these documents focus on education finance, which is understandable considering these studies were sponsored by donor or bilateral aid agencies who need to know how much things cost. This is not necessarily bad in that they emphasize reducing costs and improving efficiency.
5. The focus on finance tends to overshadow the attention to learning. "Rare is the document in which learning features prominently as the central concern. Even more rare is the study where enhanced and extended learning – something more than

improved examination results – is the principal object of a proposed reform or the primary measure of its success” (p. 25).

Samoff goes on to explain how similarities in what they do not address, particularly their unselfcritical nature and their lack of attention to theoretical and methodological issues diminish their usefulness. These studies, despite usually identifying problems in the available data, do not attempt to correct these problems or to develop strategies to work with flawed data. Furthermore, most studies do not include margins of error in their findings. Nonetheless, these studies exist and can be used to add to the knowledge base on schooling in developing countries, albeit given the reservations mentioned above.

Research on school effectiveness in developing countries available for study follows a general trend. Riddell (1999) asserts “the great bulk of school effectiveness research in developing countries is hardly distinguishable from the production functionists.... Despite being carried out by educators, such research, unlike that carried out in industrialized countries, has had little to report on the teacher-learner interface, being focused on the marginal utility of different educational resources (read ‘inputs’) on academic achievement scores” (p. 212). In other words, what inputs achieved maximum return on the investment. These studies were statistical analysis of surveys and numerical data usually using correlational analysis. Proxies were used to estimate teacher and school quality. Hanushek (1986), a World Bank economist, summarizes this approach to school effectiveness research:

Studies of educational production functions (also referred to as “input-output” analyses or “cost-quality” studies) examine the relationship among the different inputs into and outcomes of the educational process. These studies are systematic, quantitative investigations relying on econometric, as opposed to experimental, methods to separate the various factors influencing students’ performance (p. 1148).

A typical example of the type of information published in a sector analysis is as follows (from Simmons and Alexander 1980):

The influence of teacher characteristics on student performance is a central issue. Although no general policy recommendations for these variables can be made, each of the following conclusions is suggested by the majority of studies:

- Teacher certification and academic qualification are not important at primary and lower secondary grades. But they do appear to be important at upper secondary grades in some subject areas, such as science, given the consistency across developed and developing countries in the IEA science study regarding the significance of post-secondary schooling of teachers.
- The percentage of teachers on permanent contract (tenure) has no effect on student achievement in primary and lower secondary grades....
- Teacher experience tends to have a positive influence on academic achievement in primary and lower secondary grades.

These findings are based on quantitative studies of educational inputs (human and material) such as class size, teacher qualification and textbook availability, to see which produce more learning as measured by student results on standardized exams.

A 1978 research review sponsored by World Bank (Husen et al 1978) further demonstrates the research efforts of the era. Husen reports a systematic search for studies within the context of student achievement and teacher characteristics yielded 32 “legitimate and valid empirical studies” (p. i) in developing countries. These 32 studies were analyzed with respect to a list of 16 quantifiable teacher attributes. The findings are as follows:

- Teacher sex – mixed results, with male teachers generally seeming to be better with science and female teachers better with foreign languages and in early years.
- Age of teacher – mixed results, but some indication older teachers are better in secondary schools.
- Teacher socioeconomic status – in general, teachers with higher SES backgrounds are more successful.
- Frequency of English in childhood home – is obviously only applicable where English is the language of instruction and not the native tongue. It was found to be unrelated to student achievement.
- Teacher educational attainment – although the results were mixed, teacher schooling did seem to be more important for primary and early secondary grades as well as for subjects like math, science and literature which require special skills.
- Teacher credentials and certification – were found to be important for successful teaching.

- Teacher ability and achievement – were also found to be important for student achievement.
- Teacher experience – is important for student performance in primary and early secondary grades, but less so for upper secondary grades.
- Teacher salary – was not found to be consistently important, perhaps because of high intercorrelation between teacher salary and other teacher variables.
- Teacher upgrading programs – little research found, but the two studies reviewed indicate such programs are effective.
- Teacher expectations of students – were found to be the most consistently important variables in the achievement literature.
- Teaching methods – in this case instructional television and programmed instruction, were found to correlate positively with student achievement, but the surveyors express doubts about the reliability of the original studies.
- Teacher absenteeism and punctuality – also were only lightly covered by the studies. No relationship was found between teacher assiduity and student achievement.
- Teacher attitude toward job and career – was not found to be important.
- Teacher behavior – which they operationally define as assignment of homework and time spent preparing lessons, did not clearly appear as an important variable.

Husen, as is true of most studies of the era, did not observe classrooms to see teachers at work.

‘What gives the best return on the investment’ has been the philosophy driving these large-scale studies, a rather understandable attitude for a financial organization, but one which limits the usefulness of the results. Smits (1985), when making an inventory of Dutch development projects and programs in education, noted, “[i]t is interesting that there is a complete lack of studies with either a pedagogical or didactic orientation as such” (p. 149). Scheerens (2001) confirms “...the predominance of the production function approach...” and that “...instructional and pedagogical theory appeared to be practically missing as a source of inspiration for educational effectiveness studies in developing countries” (p. 365).

The production-function paradigm, while largely abandoned in the U.S. (Fuller and Snyder 1991), still persists in studies of schools in Africa (Scheerens 2001). For example, in South Africa, Case and Deaton (1997), using quantitative methodology to analyze large data sets, studied the relationship of educational inputs (including principally pupil-teacher ratios, school

facilities, enrollment, teachers' years of education, and expenses for schooling) and educational outcomes (test scores, enrollment, educational attainment, school attendance, and schooling for age). They found racial disparities in terms of educational inputs – in particular teacher-pupil ratios – which could be important in terms of student outcomes since they also report finding that pupil-teacher ratios have “quantitatively important and statistically significant effects among Black children” (p. ii). They argue that reducing class size by 25 percent, roughly 10 pupils per teacher, would result in increasing mean pupil achievement by one third of a year.

Other studies focus on one or two specific inputs, particularly teacher quality and, more recently, textbook use. It is perhaps no coincidence that these two aspects have been the focus of so many studies. In its 1980 education sector policy paper, the World Bank, which at the time was increasing its role in financing education projects in developing countries, names two factors as being identified by research as critical to “efficiency in learning”: teachers' qualifications and the availability of textbooks.

Quantitative studies of quantifiable teacher attributes and textbook availability are limited in the type of information they can provide (Fuller and Clarke 1994, Scheerens 2001). In part because of the limits of such types of research, interest is growing in the educational process itself, not just in which inputs yield what outputs, an expansion of the traditional input-output theoretical framework. In particular, researchers have focused on classroom-level research, which requires a change in methodology from the traditional quantitative approach.

Researchers have also been using more qualitative and mixed-methods studies to look at schools and classrooms more closely, studying how teachers work, their use of time, use of materials, and interactions with pupils (Rugh 1990, Fuller and Snyder 1991), as well as how textbooks are used (Kremer et al 1997, Harris et al 1997). While case studies of school structure, practices, beliefs and culture, of individual schools identified as effective or of match pairs of outliers are lacking in general, there are some studies worth closer analysis.

In the mid 1980s, USAID, perhaps in recognition of the lack of information on school effectiveness in developing countries, sponsored a series of “state-of-the-art” reviews of local research, including dissertations and other unpublished studies, in Thailand (Thailand Office of the National Education Commission 1986), Indonesia (Office of Educational and Cultural Research and Development 1986), and Sri Lanka (Gunawardena 1986). USAID apparently provided the national reviewers with a framework to use to organize their works, as follows:

1. Efficiency of non-traditional teaching methods.
2. Utilization of instructional materials and resources in the classroom.
3. Use of instructional time by teachers and students.
4. Determinants of retention, promotion and transition.
5. Impact of necessary physical and educational resources.

The first two areas focus on classroom-level factors whereas the final two areas are concerned with school-level factors. The third area, instructional time, is variously interpreted as gross attendance or the use of time in the classroom, varying definitions which include school-level factors or classroom-level factors. Classroom factors are undeniably important to student learning. Some authors (Teddlie and Reynolds 2000), argue that effective schools are those with more effective teachers, underlining the importance of classroom factors.

The fourth area, “determinants of retention, promotion and transition,” is particularly interesting since retention, promotion and transition are frequent indicators of school quality and effectiveness (World Bank 1980, Psacharopoulos 1988).

These reviews focus on findings rather than methodology, so no comment can be made on the validity of the findings. The majority of the studies reviewed, however, appear to be quantitative studies using statistical analysis, most likely regression, applied to information obtained by use of some sort of forced-answer survey.

The Thai review (Thailand Office of the National Education Commission 1986) covers 50 selected research abstracts researching both in-school and out-of school factors in both primary and secondary schools in Thailand. The factors these studies identify as being associated with student achievement as measured by student retention or promotion include: student-teacher ratio, teacher level of education; attendance rate, socioeconomic status as reflected in parental occupation, and standard of living.

They summarize their findings in five general categories: teacher, student, school, parents, and community.

- Teacher – “Many research studies have found that teacher qualification relates to student achievement, promotion rate, and transition rate. Schools which have a higher percentage of teachers holding at least associate bachelor’s degrees tend to have better

performance, while schools with a higher percentage of teachers holding a certificate lower than associate bachelor's degrees tend to have poorer performance. Teaching experience relates positively to students' achievement" (p. 23). Going beyond these quantitative findings, they report that "a teacher's positive attitude and behavior, in such instances as giving encouragement to and accepting suggestions from students, can motivate students to learn and participate in classroom activities, and consequently can upgrade student performance..." (p. 24). They also conclude "the amount of time provided for teaching-learning activities and for homework marking outside the classroom had positive relationships with student achievement" (p. 24). In terms of instructional strategies, they report that the majority of teachers still use traditional, teacher-centered methods, but that "some of the research findings have indicated that programmed instruction, teaching modules, and instructional packages have equal or greater efficiency" (p. 25) than the traditional materials and methods.

- Students – Gender was related to promotion rate, in that boys had a higher promotion rate than girls. Another finding is that student attendance is related to student achievement and promotion rate. They also conclude that prior schooling experience is important to student achievement. "Students who have attended preschool or kindergarten usually have a higher achievement level than those who have not" (p. 26).
- School – "School size is an important predictor of achievement", with larger schools having better average student achievement than smaller schools. They attribute this to the "advantages in terms of teaching materials, facilities, school building condition, quality of teachers, community development, and social and economic status of parents" (p. 26) that larger schools have. Further findings include that the distance from home to school is "a variable affecting the attendance rate, the promotion rate, and the level of student achievement" (p. 27). Finally, they assert that "schools that have a S/T [student-teacher] ratio greater than 30 are more likely to have a lower promotion rate and an average achievement level than those with a S/T ratio below 30", with "the optimum S/T ratio" being between 21:1 and 30:1 (p. 27).
- Parents – According to the research reviewed, "parental occupation is a very important variable affecting the attendance rate, promotion rate, and student achievement. Students who have parents in business, trade, or the civil service tend to perform better than students whose parents are engaged in the agricultural sector" (p. 28). Rather than relating occupational differences to differences in income and SES

levels, the authors explain this phenomenon in terms student absenteeism:

“agriculturally oriented occupations are subject to seasonal demands, and many students have to be absent from school or may even drop out during the harvest season to work in the fields” (p. 28). This finding could also be related to the next topic they discuss, parental attitudes towards education. They report that there is a relationship between parental attitudes towards education and student achievement and promotion. “A considerable number of parents, especially farmers, do not see the benefits of education,” whereas “a student who has a well-educated father has a better opportunity for further education and a higher achievement level than a student who has a poorly educated father” (p.29). In an echo of the Coleman report of 20 years earlier, the authors do generalize, however, that “students from a wealthy family are more likely to have a high promotion rate and achievement level, since they receive financial support from their parents to take part in various educational activities, including having access to learning materials” (p. 29). A final finding in the family component is that “students who have family problems such as a broken home, or separated parents, tend to perform poorly in school” (p. 29). Unfortunately, analysis of the various interrelationships between these factors is not possible, given the data available.

- Community – The authors found that “the community component does not affect student achievement directly, but it contributes to the educational environment, which, in turn, affects the schools, teachers, and the students” (p. 29).

These rather unsurprising results reflect Coleman’s earlier findings: richer communities have better resources and therefore better schools (in terms of budget, school buildings, teaching materials and qualified teachers) than poorer communities. “Schools whose students are predominantly poor are basically poor not just economically, but also in the quality of their education” (p. 32). Since they do not evaluate the methodologies used either in the review or in the studies reviewed it is difficult to assess the reliability of the research, though it is apparent that some of the studies used classroom observation while others used proxies (such as number of telephones in the district) for quantitative analysis. Furthermore, they do not define what they mean by student achievement, or effective schools.

In Indonesia (Office of Educational and Cultural Research and Development 1986), 35 studies were selected for review based on factors such as “adequacy of the research reports in terms of

its methodology being used and that the research is not descriptive in nature, but rather analytical” (p. 23). Furthermore, they note that “most studies concerning the utilization of instructional materials and other learning resources usually involve mathematics and/or science” (p. 55), which is similar to learning-outcomes measures used in the United States.

Of their ten conclusions, the following six are relevant to a general discussion of school effectiveness rather than on a specific intervention (such as using specific instructional modules):

- 1) The use of instructional and other learning resources – even very basic ones – by the students and teachers improve students’ achievement.
- 2) Student characteristics that affect achievement include intellectual variables (intelligence, arithmetic/quantitative ability, and conceptual thinking ability) and non-intellectual variables (positive attitudes towards certain subject matters, achievement motivation, learning participation, amount of time spent on learning, and speed and accuracy in learning).
- 3) Teacher related factors include technical factors (teaching experience, teachers’ in-service training, teachers’ educational background, and amount of time devoted to teaching) and non-technical factors (teachers’ welfare, sex, and age).
- 4) Students coming from regions where the Indonesian language is spoken every day tend to perform better than those who are from regions in which local languages are the everyday languages.
- 5) Family variables that have significant effects on student achievement include parental socioeconomic status (level of education and income), and the availability of learning facilities at home. Having both parents work does not have any effect on achievement.
- 6) Most studies concerning the determinants of effective schools put emphasis only on cognitive aspects of student performance (i.e. test scores).

Again, these findings depict only two in-school factors (instructional materials and teachers) and they are analyzed in a superficial manner. Researchers still identified out-of-school factors as significant correlates.

In Sri Lanka, Gunawardena (1986) reviewed 50 research studies conducted locally, the majority of which were dissertations utilizing survey methods for data collection. Qualitative

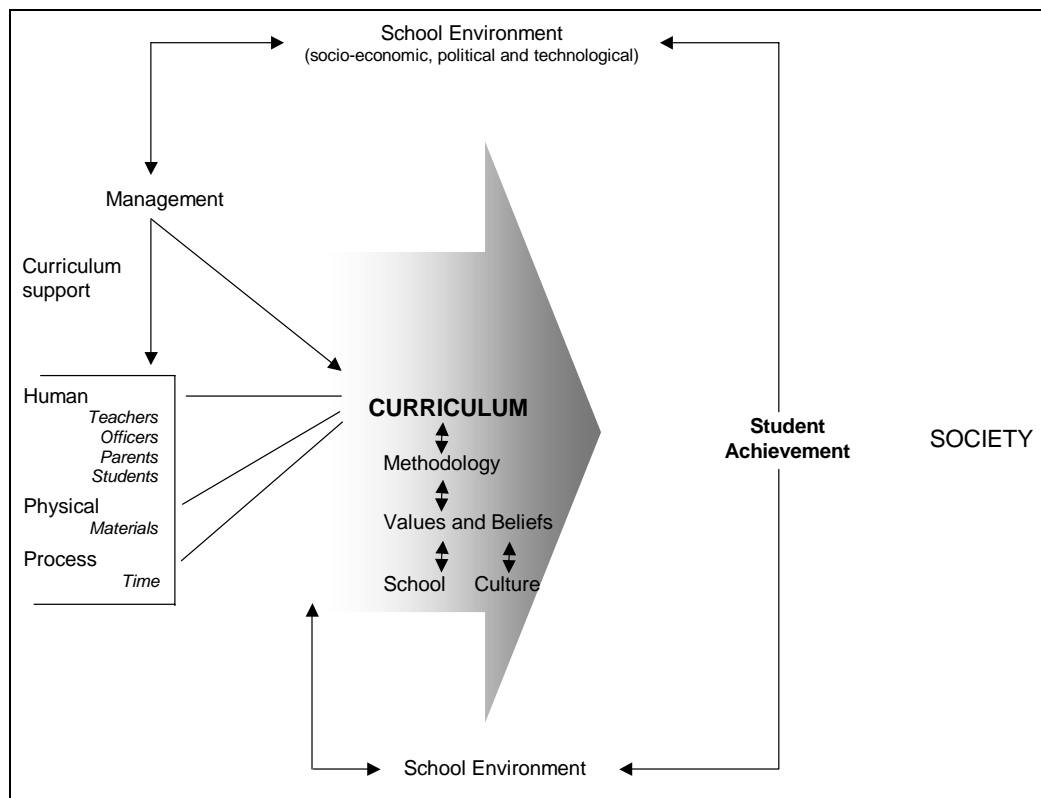
studies are “notably lacking” and “the absence of such studies appear as a gap in existing research” (p. 64), he writes, while “other characteristics which distinguish effective schools such as the school climate or the overall atmosphere, a definite value system, conducive relationships have not even been given recognition in research” (p. 65).

Like the preceding reviews for Indonesia and Thailand, the studies are organized into the same five-factor framework as used in those studies. However, Gunawardena expresses his doubts about the adequacy of a conceptual framework with only these aspects to identify all the determinants of school effectiveness. He proposes a more complete conceptual framework of school effectiveness based on the following eight characteristics:

- 1) curricular content
- 2) instructional methodology
- 3) instructional time
- 4) social and economic factors
- 5) school related factors (physical and teacher resources)
- 6) environmental factors, including geographical, technological and political factors
- 7) management at school level
- 8) school culture

The framework is presented below.

Graphic 2-1: Effective Schools Model from Sri Lanka



From Gunawardena 1986

From the elements in the framework, it appears that Gunawardena has had at least some exposure to school effectiveness research outside of Sri Lanka because of his preconceived notions of what makes a school effective. For example, in his comments about the inadequacy of the conceptual framework, he states “another determinant of effective school which has been totally overlooked in research and absent from the conceptual framework is the school culture which encompasses several aspects such as the school climate, relationships among participants in the educational enterprise at school level and the values and goals deemed as important by participant groups” (p. 67), items featured prominently in U.S. research on school effectiveness.

Gunawardena links teaching strategies with teacher preparation, particularly in terms of the teacher’s ability to make effective use of the curricular materials designed for the classroom “in accordance with the guidelines issued” (p. 56), and argues that curricular content and instructional methods should be treated as distinct sub-topics, a more useful division than grouping the two together under the original heading “efficacy of traditional and non-traditional instructional methods”.

He notes there is “scant research on the use of instructional aids in the Sri Lankan classroom” (p. 57), though the two studies he reviewed indicate aids seem to help student achievement. Gunawardena also notes a similar “paucity of research” on instructional time. He observes that one of the biggest factors which reduces scheduled instruction time is teacher absenteeism, which was seen “to vary according to teachers’ background characteristics” (p. 57). Teacher absenteeism “affected teacher pupil relationship, the quality of education and discipline” (pp. 57-58).

Gunawardena points out that studies probing social and economic factors made up “a considerable proportion of the studies reviewed” (p. 58), and “the majority used validated instruments on representative samples and thus could claim generalizability for their findings” (p.58). The findings reflect that of Coleman and others in that a “positive relationship was revealed between socioeconomic background of pupils and their drop-out/repetition” (p. 59). He continues, “on the whole, the influence of external factors has been subjected to adequate attention by researchers. It yet remains to be investigated through research, however, what measures can be taken to increase the effectiveness of schools so as to overcome the influence of external factors” (p. 60), sentiments driving a large amount of research in the US in the 70’s and 80’s (such as that of Lezotte and Edmonds).

In the category of student achievement, he notes most of the studies he reviews examined achievement at the secondary level, with only two concentrating on the elementary schools. It is curious, however, that he included student achievement in his discussion of independent variables in his theoretical framework since student achievement is the dependent variable or output. Overall, the research reports a strong correlation between achievement, location (urban vs. rural), gender, and socioeconomic background, with the “major focus of attention” on socioeconomic factors, while “school related factors such as plant facilities, instructional materials and other amenities or impact of teacher preparation or teaching quality have received only scant attention” (p. 62).

School management, according to Gunawardena, “is among the least researched areas in Sri Lanka” (p. 63). One study reviewed looked at factors influencing principals’ decision making, namely “bureaucratic hierarchy, rules and regulation, traditional values, teacher cliques and senior and more qualified teachers” (p. 64), in descending order of importance. Another study reviewed identified the following as factors influencing classroom management: school

location, type of students predominant in a school and their socioeconomic background, and “discovered variations in class climate, leadership, discipline, class control, teachers’ role and the influence of peer groups from school to school” (p. 64). Unfortunately, the findings appear to be only descriptive and do not explore the relationships discovered. Gunwardena laments that, “though good management is often considered as the key to effectiveness, very little effort has been taken to assess its role or impact on the Sri Lankan schools” (p. 64). He reports that “a significant correlation existed between educational achievement and subsequent social mobility” (p. 61), a strong argument for the benefits of education.

Similar to several large studies of the 1970s in the United States (such as Lezotte, Edmonds, and Ratner 1974, Swanson 1976 and Edmonds and Fredericksen 1978), the Harvard Institute for International Development undertook to identify good schools and poor schools in Pakistan and to identify characteristics differentiating the two groups (Warwick and Reimers 1991). A good school was defined as one which scored in the top third of curriculum-based achievement tests in mathematics and science designed and administered as part of the study, while a poor school scored in the bottom third. Research teams visited nearly 500 schools in Pakistan (Islamabad and four districts), to conduct interviews with school heads and teachers of grades 4 and 5, to give the achievement tests, to administer a short questionnaire to students in grades 4 and 5, and to rate school conditions. The interview data and school ratings assigned by the research teams were combined into clusters, such as school characteristics, the size and density of the school, the facilities available, and the personal background of the teachers and headmasters. These data were analyzed using regression analysis to identify variables that correlate with student achievement on the tests. They group their findings under the headings student background, school characteristics, the teacher, and administration and supervision.

- Student background – in rural schools there were significantly more male than female students. Concerning socioeconomic indicators, the study found that significantly more students in good schools had breakfast than those in poor schools. In another proxy for economic well-being, a factor analysis of families’ material possessions showed that good schools had more students from families with more possessions. However, when breaking down the differences between urban and rural schools, this finding did not remain true for rural schools. A more surprising finding is related to the literacy level of parents. In urban schools, good schools showed higher parental literacy rates, while in rural schools poor schools reported higher parental literacy

rates. A final finding on student background is that students from good schools were more likely to report they had after-school work.

- School characteristics – According to the researchers, “good schools are more likely to be located in urban rather than rural areas and to be male or coeducational rather than female” (p. 6). Furthermore, “the most striking finding of this analysis is the close relationship between a school’s size or density and its rating as high on student achievement” (p. 7). They report average class sizes of 47 pupils, but point out that this can be misleading since higher grades often have substantially smaller class sizes (as few as 5 students). Physical school facilities, “however desperate they may be” (p. 12), make little difference for student achievement. One final school characteristic which they report is linked with whether a school is good or not is teacher attendance. “Good schools usually had fewer teacher absences than poor schools” (p. 13), a finding confirmed during school visits. Furthermore, according to the teachers, good schools have more time available for teaching and learning (i.e., more periods per week, more minutes per week) (p. 19).
- The teacher – differences in teacher characteristics between good schools and poor schools were found in the following areas: gender, level of schooling, the education of their father, the type of appointment they hold, and whether they receive income from work other than teaching” (p. 15). Good schools have more male teachers, have teachers with higher levels of formal education (though not on certification to teach), and have teachers who are married and living with their spouse or parents. Teachers’ material possessions, as a proxy for socioeconomic status, do not appear to make any difference. Aside from these crude quantitative variables, the researchers attempted to ascertain whether teacher behavior in classrooms differed between good schools and poor schools. As one would intuitively expect, teachers in good schools “spend more time with each class, cover the required materials more completely, have students with greater access to textbooks, and use student translators to make their presentations accessible to pupils who do not understand their language” (p. 17). Textbooks and teaching kits were also positively associated with student learning.
- Administration and supervision – Warwick and Reimers point out cultural aspects of school leadership. “While leadership suggests dynamic efforts to mobilize teachers and students to go beyond what is stated in the rules, administration and supervision stress correctness in the handling of required forms, good order and discipline in the classroom, and conformity to generally accepted concepts of how teaching should take

place” (p. 23), which is quite a contrast from the ‘maverick’ school leader of effective urban schools in the U.S. Nonetheless, the researchers report that the traditional tasks of supervision are related to student achievement, though not as strongly as other variables.

Warwick and Reimers summarize their findings as follows: “The most clear, consistent, and repeated findings center on the size and density of the school. Good schools have more students, more teachers, a higher student-teacher ratio, and are more likely to be rated as crowded” (p. 2). The finding that larger classes correspond to better student achievement contradicts the findings from Thailand (National Education Commission 1986) and South Africa (Case and Deaton 1997). And while the research in general is focused on inputs, they do observe that “what school heads do in school also influences the completion rates of their students. The highest rates appear with heads who take time to supervise teachers and call meetings with them and the lowest when they spend most of their time teaching” (p. 11), a finding similar to that in the U.S. effective schools literature.

Another mixed-methods study took place in Burundi (Eisemon et al 1990), this one under the auspices of USAID. The researchers investigated the effects of language policies, school management and instructional practices on student achievement as measured by researcher-prepared tests. An experimental approach was used to assess differences between testing in French and in the students’ mother tongue. Research methodology included interviews with school directors and teachers, application of surveys for school directors and teachers, administration of special tests to assess student achievement in language, math, science, and agriculture, along with classroom observations. Nearly 2,000 sixth grade students in 47 schools were tested. On average, between six and ten days were spent at each of the schools selected for the fieldwork. Observation data was converted into quantifiable data for correlational analysis. They report five findings:

1. Students exhibited low levels of achievement in all subject domains tested, though testing in the mother tongue seemed to improve measurement.
2. The policy of changing to French as the medium of instruction in grade five depresses student performance on tests in sixth grade.
3. Some instructional practices designed to increase opportunity to learn (providing extra hours of instruction, for example) have little impact on learning.

4. School management has a strong direct and indirect influence on both instruction and student learning.
5. Repetition has more effect on student performance than any other social background, school or instructional variable measured. High repetition rates are more an indicator of limited opportunity to learn since in Burundi repetition is largely voluntary and students elect to repeat in order to try repeatedly to qualify for secondary school.

Graham Vulliamy (1987), researching school effectiveness in high schools in Papua New Guinea, reports that “teachers commented on many factors – a school’s facilities, teacher housing, the discipline of the students – but one was paramount and that was the importance of the head teacher” (p. 216). Interviews with teachers developed a profile of an ‘ideal head teacher’, which included, among its eight characteristics: setting a good example especially in relation to punctuality; having high expectations of staff and students; and having active interest in in-service development. These are all factors identified in developed world studies as well. His conclusions also echo findings in U.S. studies in that school effects are related to “school-process factors that are more elusively categorised as features of school climate or school culture...” (pp. 217-18). However, on one point he disagrees with the research in the developed world. “...The argument in the First World literature that levels of resourcing and physical facilities are unrelated to student achievement does not seem to be applicable in the Third World context. ...The lack of the most basic facilities in many Third World schools... not only depresses staff and student morale but also acts as an impediment to effective teaching and learning” (p. 219-220). Therefore, some minimum level of resources is necessary as a threshold for learning to take place in schools.

Heneveld and Craig (1996), in a study of how World Bank sponsored projects take into account school effectiveness factors, reviewed and summarized the literature on school effectiveness and school improvement (an offshoot of school effectiveness research), the majority of which are from Europe and North America. They then developed definitions meant to be relevant to Africa. To do so, they tapped the literature they reviewed, other World Bank documents and personal experience. They point out that they have “gone beyond the strictures of formal research in saying these definitions are appropriate to Africa” (p. 7) and therefore tried to make them general enough for modification to local contexts. In the end, they offer the following list of effective school factors (p. 67-82):

Supporting inputs:

Parent and community support

- Health and learning preparedness
- Financial and/or material support
- Frequent communication between school staff and parents
- Assistance with instruction by community members and parents
- Community role in school governance

Effective support from the education system

- Delegation of authority and responsibility
- Communication of expectations
- Provision of services
- Monitoring and evaluation

Adequate material support

- Textbooks and other reading material
- Teacher guides
- Paper and writing implements
- Classrooms
- Classroom equipment

Enabling conditions:

Effective leadership

- Necessary resources are available
- High instructional standards are pursued
- Regular and effective communication with teachers, parents and the community
- High visibility and accessibility

A capable teaching force

- Knowledge
- Experience
- Stability
- Full-time

Flexibility and autonomy

- Cooperative decision making by the head and teachers for specific school processes
- Independence to acquire and distribute resources according to the school's decisions

High time-in-school

- The established number of days and hours per day are high
- The school is in session and operating for the established number of days and hours per day

School climate:

High expectations of students

- Clear academic and social behavior goals
- Communication of expectations
- Opportunities for student responsibility
- Past achievement levels

Positive teacher attitudes

- Confidence
- Commitment and caring
- Cooperation

Order and discipline

- Well-organized classrooms and classes
- School rules and regulations

Organized curriculum

- Acquisition of basic skills
- Systematic scheme of work
- Learning resources

Rewards and incentives

- Clear academic standards
- Academic success is recognized

Teaching/learning process

High learning time

- Maximized school learning time
- Efficient use of classroom learning time

Variety in teaching strategies

- Active engagement of students by the use of a variety of teaching techniques

Frequent homework

- Homework is assigned, completed and feedback provided

Frequent student assessment and feedback

- Regular and integrated assessment and feedback
- Assessment used for diagnostic purposes
- Feedback is immediate and continuous

They caution “that the research that supports the selection of these factors is mainly focused on the industrial world... [a] limitation that needs to be recognized” (p. xiv). Nonetheless, the model they developed has become the World Bank standard, as reflected by its continued appearance in World Bank documents concerning school effectiveness in developing countries (e.g. Saunders 2000).

Other educational researchers working in developing countries also turned to effectiveness models developed in the industrialized world. Lockheed and Verspoor (1991), borrow from American research, naming an orderly school environment, clear goals and high expectations, a sense of community, and strong instructional leadership as key elements, plus mentioning that British research “suggests involving students in school decisionmaking enhances attendance and encourages positive behavior” (p. 43) and finishing with the assertion that “the acquisition, distribution and use of material inputs” must be included in lists of school effectiveness in developing countries as well. Kerley and Dutcher (1996), evaluating a series of USAID sponsored projects intended to strengthen research capacity in developing countries through

classroom-centered research, relied on U.S. research on the attributes of effective teachers in order to assess the impact of the project on students.

While not an effective schools study per se, a team of researchers undertook a baseline study in Uganda using Heneveld and Craig's framework of school effectiveness (Caresco et al 1996). The purpose of their study was to evaluate the quality of schools in Uganda, which in itself is enlightening in terms of school effectiveness research in that it illustrates many of the forces at work which have been previously discussed. To begin with, the research was sponsored by USAID as part of a development aid project. The second item of interest is how the researchers have accepted a model based at least in part on school effectiveness research conducted in developed countries, which together illustrate both the lack of suitable domestic research as well as the influence of outside agencies. However, the Uganda study does break from the mold in that it is not based on the long-dominant production-function paradigm.

Adopting a more sophisticated model has necessitated a change in research methodologies as well. Twenty-four government aided schools that were included in a project were selected as being representative in terms of rural-urban, student achievement on the Primary Leaving Examination, and student grades (high, medium, and low performing elementary schools offering grades 1-4 from urban, peri-urban, and rural areas) using a sampling design which utilized surveys and Participatory Learning Analysis (PLA) in a multi-stage, multi-purpose sampling design. Sample schools were visited to obtain a school profile using interviews, PLA methodology and other data collected in each school. Twelve classroom observations were conducted in every school (three times in each of the principle subjects) in second, fourth and sixth grades. Six pupils from each school selected by the headmasters were interviewed and tested, with an even number of boys and girls being included. Five adults were interviewed from the PTA, School Management Committee and Local Council executive committee as well as a parent who was not on any of the committees, plus a teacher who has a child at one of the schools. In the PLA, two sets of pupils evenly divided between the sexes, the headmaster, a male and a female teacher representative, and the community were included in the process.

The findings were grouped into the same six general components as the model:

- Decentralization: the stage of decentralization of districts may influence a number of educational inputs including policies and materials, with examples of problems in decentralized districts being given.

- Support from system: In general they found “a pervasive lack of basic facilities” (p. 8), including staff room, library, storage space, as well as insufficient number of toilets. The lack of instructional materials actually in use in the classroom was also noted.
- Parent and community support: “We were surprised by the conclusiveness of our findings regarding the community as a support system. ...The school that performed best on our achievement tests had the highest community involvement we observed during the study. Conversely the three worst performing schools on the same tests generally had minimal community involvement” (p. 10).
- School Internal Factors: School culture, the classroom teaching and learning process, and children’s conditions (cleanliness, health, tiredness, hunger and other learning-readiness factors.)
- School culture (the overall character of the school, which includes the use that is made of what resources are available – the classrooms, grounds, and instructional materials—the quality of the teacher staff, the level of order and discipline in the school – as indicated by the observance of a daily schedule – the relationships between staff and pupils and the expectations that teachers have for the pupils) (p. 13).

The research team described a poor school culture in Uganda as follows:

The school has a problem keeping its teachers because of the lack of water. Those that stay are not supervised either by the headteacher or by the DEO. Teacher tardiness and absenteeism are high so that classes go unattended regularly. The school staff is headed by a Grade V teacher with a teaching experience of eleven years. He is an easy going fellow who has cultivated an easy relationship with his teachers and the parents. Of the five teachers on his staff, three are grade 3 and two are untrained. They find communicating in English difficult and tend to teach in vernacular. Both the headteacher and his staff believe that the children are low performers. The finding that the staff have low expectation of pupils could be the outcome of failure of teachers to teach them because of the irregular attendance and poor time keeping (tardiness). The latter may be related to lack of such basic necessities as water (p. 13).

The interviews support Henneveld and Craig’s assertion that some minimum resources are necessary and graphically illustrate some of the challenges schools in Africa face.

- School leadership: the Headteacher—“Our overall impression with regard to headteachers as leaders was that the majority of them tended to behave like village despots who controlled schools centrally” (p. 13). “We observed a regular headteacher practice of locking text books and other learning aids in the headteachers’ offices” (p. 13). “The situation of alcoholic, predominantly untrained male teachers and a despised concubine-deputy has resulted in a very low performing school. In this school, a teacher will teach one lesson from the beginning of the school in the morning to lunch time” (p. 14).
- The Teachers: The conditions under which the teaching force within primary schools is effective is when teachers are trained, experienced, organized and motivated. It is extremely rare to find all of these qualities in a single school” (p.15).
- The Classroom Teaching-Learning process: “In a large proportion of schools the teachers’ problems are fundamental to being able to teach and teachers are unable to transcend them in order to deal with classroom related issues” (p. 19).
- Teaching Methods: “We looked at the teaching-learning process using three indicators which are high learning time, teaching methods and assessment. We created an index of assessment and feedback from the following activities: giving homework, marking it, and providing feedback to the pupils. We found that, on average, schools that scored high on the achievement test, also scored high on our assessment index” (p. 21).
- Student Outcomes: An important indicator to parents, and the society, of primary school effectiveness is the level of passes on the Primary Leaving Examination, and the proportion of pupils who are able to continue to secondary school.

What is particularly remarkable about this study is the depth and completeness of the findings where characteristics normally not seen in traditional studies become apparent, such as headteacher practice of locking away textbooks (which may very well be counted as available in a survey-based study) and the problem of school morale caused by the concubine-deputy (which would never appear as one of the choices in a survey instrument designed for teachers).

Another recent study which examines schools from a more in-depth perspective than has traditionally been done in the developing world took place in Malawi (Shirley and Dowd 1998). Rather than try to evaluate the quality of the entire school system in the country, Shirley and Dowd were concerned with evaluating the impact of a special project implemented

by the Save the Children Foundation. As part of their study, they focused on two areas of inquiry which shed light on school effectiveness: Teaching and learning as well as institutional support for teaching and learning.

Methodologically they chose a mixed-methods design for their study utilizing both quantitative and qualitative methods. Quantitative analysis used the gains measured by a set of pretest-posttests to judge school effectiveness from a group of 238 non-repeating, non-transfer second-grade students. Roughly half of each gender was taken from schools in different categories of project intervention. The qualitative portion of the study utilized school visits conducted over a two-week period. Six schools were visited for three days each, whereas the remaining six were visited for one day apiece. Sustained classroom observations were carried out during the longer three-day school visits. Additional information was obtained from studying documents. Interviews were conducted with teachers, headmasters, parents of school children, school committee members, as well as separate interviews with mothers only “since previous experience had demonstrated that women would speak less with men present” (p. 13). Furthermore, ten third-graders, five boys and five girls, were selected at random and interviewed. Finally, a small group of second graders (3 boys and 3 girls) who had been identified as being absent frequently were also interviewed.

While most of their findings concern specific interventions of the project in comparison to schools where the interventions had not been done, some are nonetheless of interest to a more general discussion of school effectiveness research in Africa. One important finding is that teacher supervision helps improve student performance.

2.3.1. Summary of Research in the Developing World

Until fairly recently, nearly all research in developing countries was done at the macro level looking for what inputs would yield the greatest benefit using the production-function paradigm and quantitative analysis. Donor agencies dominated the research environment because of a lack of capacity (both human and financial) in domestic universities and ministries of education, as well as due to their financial power. Being quantitative analysis of proxies for school effectiveness and various inputs, these studies provide little information as to what actually takes place in schools. When school and classroom level research was conducted, it was usually focused on a limited set of inputs and did not present global pictures of school life and school processes. Encouragingly, emerging research is moving to more complex methodologies such as those used in research in developed countries and is taking the school as the unit of study.

The studies reviewed focused on differing aspects of education. Some have had a narrow focus on specific inputs, such as textbooks, without looking at how these inputs are used (Jamison et al 1981, Heyneman and Jamison 1984), or quantitative inputs such as teachers' level of education, pupil/teacher ratios (Fuller et al 1991, Case and Deaton 1997), while others have included information on the use of inputs at the classroom level (Warwick and Reimers 1991). Several of the studies have examined factors such as teachers' socioeconomic background, student ability (Office of Educational and Cultural Research and Development 1986), student background and family socioeconomic status (Thailand Office of National Education Commission 1986, Office of Educational and Cultural Research and Development 1986, Gunawaradena 1986, Case and Deaton 1997) and other factors out of the control of schools. The following chart lists factors which are within the ability of schools to control that have been found to correspond with student outcomes by two or more of the studies:

Table 2-4: Comparison of studies confirming effect of in-school factors

Factor	Number of Confirming Studies
Teacher training and qualification	5
Teacher experience	3
Teacher attitude and behavior	3
Teacher education	4
Teacher supervision	4
Teacher punctuality and assiduity	2
Textbook availability	5
Use of instructional and learning resources	4
School physical facilities / classroom furniture	3
Pupil health	2
Time	4
Prior schooling (incl. preschool)	2
Student-teacher ratio	3
Community involvement	2

It is important to remember that these studies did not all look at the same factors, so a small number of confirming studies reflects the narrow data base caused by limited overlap rather than lack of agreement. Indeed, few studies had contradictory findings. Tan et al (1997) found no correlation between student outcomes and teacher experience and they also report a Master's Degree to be a poor investment because the performance of teachers with Master's Degrees was not sufficiently better than those without. The Office of Educational and Cultural Research and Development) 1986 in Indonesia report that "female teachers teach better than male teachers" (p. 43), a finding in direct opposition to Warwick and Reimers' (1991) findings in Pakistan, an interesting finding considering that both are Islamic countries. Further contradictory findings include Eisemon et al (1990), who report that additional instructional time did not contribute to higher student outcomes, whereas, the Indonesian Office of Educational and Cultural Research and Development (1986), Warwick and Reimers (1991) and Carasco et al (1996) all report correlations between time and learning. A final contradiction in findings concerns pupil/teacher ratios. Thailand Office of National Education Commission (1996), Fuller et al (1991) and Case and Deaton (1997) all find a relationship between pupil/teacher ratios and student outcomes, with the Thai report concluding that the ideal ratio is

between 21 and 30 students per pupil, while Tan et al (1997) do not find reducing class size to be a good investment.

2.4. Conclusions from the Literature Review

Despite the reservations given by the reviewers, none of them suggest that the research was too flawed to be of use or, even more importantly, that the basic assumption behind the research – that some schools are more effective than others – is wrong. Indeed, there is widespread support by the reviewers for the research into school effectiveness. Rosenholtz (1985) gives several “reasons to regard the findings as more than spurious” (p. 353), while Purkey and Smith (1982, p. 67) “...find a substantive case emerging from the literature” that the identified characteristics are associated with a school’s effectiveness, and that “flaws in the original research should not discredit the notion of discovering effective school characteristics – seeds for school improvement that can be sown elsewhere” (1983, p. 439).

Due to the “...marked absence of high quality insight into the operations and dynamics of education systems in different countries...” (King 1990, p. 53), particularly in developing countries, some authors on international education, such as Heneveld and Craig, have drawn up their own list of school effectiveness factors – but have included findings from US research in their list. Therefore, it should not be surprising to find these characteristics are not greatly different from those found in U.S. school effectiveness literature. Table 2-2 compares Heneveld and Craig’s list of effective school factors, Teddlie and Reynold’s list of research findings from 10 non-Developing countries, and the author’s literature review findings, both from the developed and the developing worlds.

Table 2 -5: Comparison of four reviews of the school effectiveness literature.

Heneveld and Craig’s Synthesis of First and Third World Research	The Author’s Review of Third World Literature	Teddlie and Reynolds Comparison of Review in the First World	The Author’s Review of US Literature
Parent and community support	Pupil health Community involvement	Level of expected further education	Parental involvement
Effective support from the education system:	Student-teacher ratio	Class size	
Adequate material support	Textbook availability School physical facilities / classroom furniture		

Effective leadership	Teacher supervision		Administrative and/or instructional leadership
A capable teaching force	Teacher training and qualification Teacher education Teacher experience	Teacher experience	
Flexibility and autonomy			(in comparison to the centrally controlled schools in Africa, US schools have a great deal of flexibility and autonomy)
High time-in-school	Teacher punctuality and assiduity	Time spent on teaching	
High expectations of students	Use of instructional and learning resources	Teacher expectations	High expectations for students (also staff, though not cited as frequently)
Positive teacher attitudes	Teacher attitude and behavior		
Order and discipline		Time spent keeping order (negative association)	Orderly environment or effective discipline
Organized curriculum			
Rewards and incentives			School-wide recognition of positive performance
High learning time	Time	Opportunity to learn	Maximized use of time for learning
Variety in teaching strategies			
Frequent homework		Homework	
Frequent student assessment and feedback			Monitoring of student progress
	Prior schooling (incl. preschool)		
		Urbanization	
		Number of male teachers	
		Number of female teachers	
		Father's education	
		Father's occupation	
		Use of own tests	
		Use of published tests	
			Clear mission or goals and objectives for students and the school

As the table shows, several factors are common across all reviews, regardless of whether they are from developing or developed countries. Specifically, the following three factors have been identified as important in all four reviews:

- parent and community support,
- high expectations, and
- high learning time (i.e. teachers' time management).

In addition, five more factors are common across three of the four reviews:

- class size (implying a sufficient supply of teachers and classroom space),
- effective leadership/teacher supervision,
- a capable teaching force (educated, trained and experienced),
- high time-in-school, and
- an orderly learning environment,

A further four factors are identified in two of the reviews:

- adequate material support (textbooks and furniture, etc.),
- teacher attitude and behavior,
- homework, and
- frequent assessment/monitoring of student progress.

Factors which do not appear in the other lists include:

- Flexibility and autonomy (US schools have a great deal of flexibility and autonomy compared to African schools, so it was a commonality between effective and ineffective schools in US, though much US research reports on the need for a leader willing to buck the system, implying taking even more autonomy)
- Organized curriculum – taken for granted in the US
- Variety in teaching strategies – US research review did not focus on classroom-level factors
- Prior schooling – student background not an in-school factor considered
- Urbanization – perhaps interesting but not of value since many children live in rural settings and they deserve an equal opportunity to have a good school
- Number of male teachers – not a policy factor
- Number of female teachers
- Father's education – student background not an in-school factor considered
- Father's occupation – student background not an in-school factor considered

- Use of own tests
- Use of published tests
- Clear mission or goals

In addition to this difference in the two lists, Heneveld and Craig include several characteristics which do not appear often in the U.S. research reviewed. Some of these characteristics can be grouped together as ones not present in U.S. research. In this grouping, one can place the factors “a capable teaching force” and “adequate resources”, although U.S. researcher Levine (1991) does mention superior acquisition of resources, implying that more is better.

Another grouping consists of classroom-level factors not considered in the review of U.S. literature since it focused on school-level factors. “Variety in teaching strategies” and “frequent, well-supervised homework” fit in this group, although some of the U.S. literature reviewed also mentioned these factors (Joyce et al 1983), even though several authors (Brookover 1985, McCormack-Larkin 1985, Murphy et al 1985, and Cohen 1983) have identified “structured direct instruction” rather than “variety in teaching strategies”.

The remaining factors appearing in the Heneveld and Craig list also appear occasionally in U.S. literature on effective schools. “Collaborative planning and collegial relationships” were mentioned in reviews by Levine (1990), McCormack-Larkin (1985), Murphy et al (1985), and Purkey and Smith (1983); the factor “sense of community” was specified by Cohen (1983), and Purkey and Smith (1983); “flexibility and autonomy” was likewise named as a factor by Purkey and Smith (1982) in their first review; “effective support from the educational system” was identified in reviews by Levine (1991) and Purkey and Smith (1983); “school-wide staff development” got more attention in the literature, being discussed by Levine (1991), Murphy et al (1985), Purkey and Smith (1983, 1982), Sweeney (1982), Clark et al (1980); “staff stability” was mentioned by Purkey and Smith (1983); and “curriculum articulation and organization”, or other terminology to that effect, was identified in articles by Levine (1991), McCormack-Larkin (1985), Murphy et al (1985), and Cohen (1983).

In summary, it is clear that there is much agreement between the compilations of school effectiveness factors and that there is a good deal of literature in support of each element.

2.5. Theoretical Framework

The twelve characteristics identified in the literature review as being the most commonly found in reviews and studies, both in developed countries and in developing countries, form the theoretical base for this paper. The twelve characteristics are as follows:

1. parent and community support;
2. high expectations;
3. high learning time;
4. class size, implying a sufficient supply of teachers and classroom space;
5. effective leadership/teacher supervision
6. a capable teaching force (educated, trained and experienced);
7. high time-in-school;
8. an orderly learning environment;
9. adequate material support (textbooks and furniture, etc.);
10. teacher attitude and behavior;
11. homework;
12. frequent assessment/monitoring of student progress.

Qualitative research, mainly interviews and observations, will be used to gather information regarding school effectiveness in Cape Verde. This data will then be analyzed according to the twelve characteristics to first look at the validity of the theoretical framework, and second to discover what can be done to increase a school's effectiveness. Specifics of the research methodology are found in chapter 3.

2.6. Summary of Chapter Two and Preview of Chapter Three

Chapter Two has reviewed relevant literature on school effectiveness studies, starting with research in the developed world, including a discussion of the criticisms of the research, before turning to a discussion of school effectiveness research in Africa and the developing world. The international and domestic U.S. research is then compared and conclusions discussed. Finally, a general theoretical framework of school effectiveness based on the research has been presented.

Chapter Three discusses the research procedures and techniques to be used for the study. Beginning with a brief discussion of the mixed methodological nature of the study, the chapter presents the techniques to be used and describes the collaborators. The selection of a sample

for the study is next. The chapter then moves on to describe the type and nature of expected data to be gathered. Following this is a discussion of the research design and major research questions. Data analysis procedures are then presented, followed by the limitations of the study. Chapter Four presents the data analysis, and Chapter Five presents conclusions and implications for further research.

3. Methodology

The methodology used in the research for this paper was multi-faceted and multidimensional. Principal research methods were semi-structured and unstructured interviews, group discussions, and observation. Data gathered during seven years of working and living in Cape Verde form the base of the information used with additional data coming from a summative project evaluation looking at factors which had a positive impact on the work of teachers, teacher trainers, and school principals in an attempt to improve the quality of the education the children receive. All of the data is qualitative in nature and was gathered personally by the researcher.

Qualitative research studies behavior "...in its natural setting rather than in a laboratory or experimental one. ...Usually, the researcher is not focusing on a single variable or single behavioral outcome but is studying the process as it naturally occurs..." (Krathwohl 1998, p. 25). Maxwell (1996) identifies "understanding the process by which events and actions take place" (p. 18) as one of the "research purposes for which qualitative studies are especially suited" (p. 17). Filstead (1970) points out that qualitative methodology has advantages because it "...allows the researcher to 'get close to the data', whereby developing the analytical, conceptual, and categorical components of explanation from the data itself – rather than from the preconceived, rigidly structured, and highly quantified techniques that pigeonhole the empirical social world into the operational definitions that the research has constructed" (p.6).

Qualitative methodology is appropriate for this study since the research questions are concerned not with inputs or outputs, but rather with the processes which take place in a school to produce outputs. Vulliamy argues that qualitative research "...is particularly suited to the study of the processes of schooling..." (p. 154). Qualitative methodology has a long history in effective schools research, back to Weber's (1971) groundbreaking study.

Despite this long history, rich, detailed qualitative information on schools in developing countries, is still sparse, as was explained in the literature review above, though this may be slowly changing. King (1990, p. 53), when discussing international collaboration in educational development, comments that "[w]hat is missing is any powerful insight on the role of education from the perspective of the patient [i.e. teachers and students in developing countries]." Hurst (1987), in the same context quips, "an ounce of insight is worth a mountain of multiple regression" (p. 69). He argues furthermore that qualitative research is particularly

fitted for research in the developing world since it is configured to explore “the quiddity, the uniqueness of particular cultures, contexts and personalities” (p. 72).

However, qualitative inquiry has not been without its critics. Hurst (1987) points to two related problems of qualitative research. First is the problem of external validity. “...[T]he absence of an agreed convention, technique and instrumentation for measuring the phenomena in question means that it can be difficult or impossible to establish that another observer might not interpret the same events in a quite different manner, or even that both have observed the same things. The second problem is that of corroboration, of establishing that events reported actually occurred and that the evidence presented has not been fabricated” (p. 70). He cites Miles and Huberman, who point out “the most serious and central difficulty in the use of qualitative data is that methods of analysis are not well formulated” (p. 70).

Nonetheless, qualitative methodology has been accepted as a valid and important research tool. Qualitative research can take many forms (Patton 1990), but the one particularly suited for this research is the case study. Since the objective of the study is to learn why school effectiveness increased in some areas because of outside interventions and why those interventions were successful, it is necessary to look at the individuals and group processes in that school in depth in the form of a case study. Marshall and Rossman (1999) argue that “[a] rich tradition of community studies, organizational research, and program evaluations documents the illustrative power when research focuses in depth and in detail on specific instances of the phenomenon of interest” (p. 159). Furthermore, they assert that “studies focusing on society and culture, whether a group, a program, or an organization, typically espouse some form of case study as an overall strategy...”(p. 61).

3.1. Techniques

This study used qualitative methodologies, principally observation, interviews, and group discussions. “Observation and interviewing are the major qualitative data-gathering methods... [however] qualitative data may be gathered from situations as diverse as the human imagination permits.” (Kratwohl 1998, p. 240). Qualitative research is holistic and as a result, “qualitative research tends to incorporate a wide variety of specific techniques, even within one research project (Vulliamy et al, cited in Brock-Utne, 1996, pp. 609-610).

Observation can be done in a “continuum that varies from complete immersion in the setting as a full participant to complete separation from the setting as a spectator” (Patton 1990, p. 206). On this continuum, the present study was conducted much closer to the spectator, or nonparticipant, end of the range than full participant since the researcher was neither a student, a faculty member of the school nor an administrator of the school system studied, though he was active in the project activities, many of which involved the school personnel interviewed. Nonparticipant observation “...provides the researcher freedom to concentrate entirely on observation and to become sensitive to the significance of what is occurring.” (Kratwohl 1998, p. 252). Observations were conducted at the school, in the classrooms and during any school-related activities involving parents or the community. The observations attempted to view all aspects of the school from normal teaching to testing, and from faculty meetings to parental meetings. School visits varied in length from a few hours to several consecutive days over the period of seven years.

Another important data-gathering technique was interviews. Three types of interviews were used: informal individual conversational interviews, semi-structured interviews, and group discussions. With informal conversational interviews the “questions emerge from the immediate context and are asked in the natural course of things; there is no predetermination of question topics or wording.” Semi-structured interviews are based on a loose set of questions or topics of interest to the research which form a guide for the interview but no previously prepared questions are used (Patton 1990). Similar to the methods used in the New York Office of Education Performance Review (1974), where “The opinions of school personnel, community members, and students were elicited both formally and informally” (p. 19), this study used a mix of interview formats.

The group discussions approach is different. Specific questions were prepared in advance and the groups wrote their thoughts and comments concerning the specific question on small cards. These cards were then posted on a board for all to see and read, often provoking further ideas. Once no more cards were forthcoming, each card was read and discussed for clarity and grouped in a natural, emerging form. Duplicate cards were removed after discussion and consensus. At the end of the process, each participant has had the opportunity to individually comment on each question as well as contribute to general discussions. Patton (1990) quotes Brown et al (1989) in asserting that group discussions bring synergistic benefits to qualitative research.

3.2. Collaborators

In this study collaborators consist of teachers, administrators, staff, students, and parents of the selected districts. Furthermore, semi-structured interviews and informal individual conversational interviews were conducted with as many students and parents as were willing, both at school and in their homes. Scores were interviewed over the years. An exact number is not available since during the time span during which data was gathered, there was a continual change with some teachers leaving and new teachers arriving. All teachers in 40 schools on Fogo and Brava were interviewed and observed at least once. In addition to personnel at the schools and in the communities, all members of the district administration (the delegado and the equipa pedagógica) were interviewed using informal individual conversational interviews and group discussions. During the evaluation visit, two delegados, nine principals, and two high officials in the central ministry of education were interviewed. Of this number, two were females. Three groups, one from each of the school districts comprising the sample, were involved in separate focus group discussions. Total number of participants in the focus group discussions was 19, of which five were female.

3.3. Sample Selection

3.3.1. Rationale

Following the tradition of much of the early research on effective schools, this study used purposeful sampling, sometimes referred to as “extreme or deviant case sampling,” in an attempt to learn from “highly unusual manifestations of the phenomenon of interest...” (Patton 1990, p. 182). The phenomenon of interest here is school effectiveness and school change. Patton (p. 169) asserts that “the logic of extreme case sampling is that lessons may be learned about unusual conditions or extreme outcomes that are relevant to improving more typical programs”, which is consistent with the purpose of this study.

3.3.2. Criteria for Sample Selection

Since the research focuses on school effectiveness and change brought about by a development project, the sample is by necessity the same as the area of intervention of the development project. However, because the project gradually expanded its area of intervention until eventually covering the entire nation, the research focuses on the three school districts where the project was active the longest and where the change effects are most substantial.

3.4. Data Gathered

The study gathered data on school-related attitudes, beliefs and practices of administrators, teachers, staff, students, parents as well as the information on internal functioning of their school. Data is in the form of field notes from observations, tapes and transcripts from interviews, photographs, and relevant documents such as tests, lesson plans, minutes from meetings, etc. Emphasis was placed on in-school processes – how and why the school and its members do the things they do – in an effort to shed light on the ‘black box’ of the school.

Information was also gathered on individual change: how they have changed as professionals since the beginning of the project and what were specific activities which brought about this change. Therefore, the data from interviews is largely opinions of those involved in the schools.

3.5. Research Design and the Major Research Questions

A qualitative case study approach is useful for studying processes as was discussed at the beginning of this chapter. Similar to Gaziel (1996) and Harber and Muthukrishna (2000) with the research questions focusing on relationships between input and process, process and output, and context and process, as well as the process itself, the chosen methodology should yield useful information.

The major questions of the study are as follows:

- a. Does the model of school effectiveness from developed countries fit Third World schools?
- b. What are interventions which can bring about improvements in Third World schools?

In the context of determining what changes have come about in their professional lives, collaborators were first asked to describe their ideal school. These descriptions of ideal schools are compared to Western research-based models to gain insights in whether the Western models truly fit African notions of schooling (see Chapter IV for the analysis). Interventions based on Western models have not always been successful in improving schools in Africa; one reason could be that the models are not sufficiently adapted to the context. This

data is compared to observational data within the context of the theoretical model derived from the literature.

Second, based on their ideal schools, school professionals interviewed were asked how far along they are towards achieving the ideal school, at least in terms of their own work, and what specifically has caused or helped them to come to that point. Specific interventions are compared to the theoretical model which emerged from the literature review.

3.6. Data Analysis

Data analyzed using a bipolar approach. The theoretical framework distilled from the literature and featuring 12 characteristics of effective schools was subjected to a two-perspective analysis. The first analysis was by comparing individual characteristics of the framework to statements from the Cape Verdean collaborators. Their opinions and beliefs with regard to that particular characteristic were used to evaluate the usefulness of that characteristic in the African context. The second analytical step was to compare the theoretical characteristic to the researcher's experience in education in six countries, four of which would be considered developing countries (Bolivia, Cape Verde, Mali, and Mozambique), and evaluate the accurateness of the characteristic in the context of education in developing countries.

For this study, data (interview transcripts, field notes, and copies of relevant documents) will be coded in terms of the theoretical framework and compiled for analysis. Elements of the framework are as follows:

- 1) parent and community support,
- 2) high expectations,
- 3) high learning time,
- 4) class size (implying a sufficient supply of teachers and classroom space),
- 5) effective leadership/teacher supervision,
- 6) a capable teaching force (educated, trained and experienced),
- 7) high time-in-school,
- 8) an orderly learning environment,
- 9) adequate material support (textbooks and furniture, etc.),
- 10) teacher attitude and behavior,
- 11) homework,

12) frequent assessment/monitoring of student progress.

Data was coded with respect to which of the components and elements it addresses. Multiple entries were possible. First step was to organize the interview notes, surveys, and observation notes according to their relevance to the theoretical framework. This step was done first for the information on Cape Verde then for the researcher's notes from other countries.

3.7. Limitations of the Study

The study of effective schools in Cape Verde does have several limitations. One limitation of the study is that the sample is not representative of all Cape Verdean educators in terms of training and experience. Findings are therefore limited to the districts and schools studied. Since the study is a case study of specific schools in specific contexts, there is no generalizability beyond that set of circumstances in the same context.

Further limitations concern the fact that the researcher is a foreigner, working in the education sector in the country who is not a native Portuguese or Creole speaker. Brock-Utne (1996) argues that "the African researcher knows his/her environment better than any expatriate and will be more likely to ask the right questions..."(p. 607). Furthermore, some people may not have been willing to speak with the researcher, while others may have colored their comments to what they thought the researcher wanted to hear. There was also the complication of language and while the researcher speaks fluent Portuguese, he is not as fluent in Creole and some participants, particularly parents, only spoke Creole.

The fact that the researcher has been working in education for seven years on the islands of Fogo and Brava is also a limiting factor in the research. Since development projects, of which the researcher is a part of one, have been major sources of funding and employment (in terms of construction of schools, for example), some people may have been able to see the researcher only in this light. Further, he is known in all the schools as a foreign education 'expert' who has worked to improve teaching and learning in the schools. On the positive side, this prior knowledge ensures access and acceptance in the schools. On the negative side, the school personnel may not be able to make a distinction between the researcher as a researcher and as a foreign 'expert'. On the other hand, seven years of immersion in the Cape Verdean culture and language can also provide insights that shorter duration visits could not.

Cultural blindness, the phenomenon which describes how one becomes inured to every day experiences (Brock-Utne, 1996), is an additional risk. Living and working in a foreign country is a learning process in itself and over time what was initially new and exotic slowly becomes normal and everyday. However, because the notes used for research cover the entire seven year period, many of these initial observations have been documented and are used to minimize the cultural blindness effect.

4. Data Presentation and Analysis

This chapter presents and analyses the data obtained during the study. The data is organized into 14 groups in relation to the theoretical framework presented in Chapter 2. The first 12 groups are the principal school effectiveness factors identified in the literature review, namely: (1) parent and community support; (2) high expectations; (3) high learning time; (4) class size (implying a sufficient supply of teachers and classroom space); (5) effective leadership/teacher supervision; (6) a capable teaching force (educated, trained and experienced); (7) high time-in-school; (8) an orderly learning environment; (9) adequate material support (textbooks and furniture, etc.); (10) teacher attitude and behavior; (11) homework; and (12) frequent assessment/monitoring of student progress. The thirteenth is a grouping of other school effectiveness factors mentioned by the Cape Verdean collaborators during the data gathering process. This data organization method leaves open the possibility that there are other factors important to school effectiveness to Cape Verdeans that are not included elsewhere in the list of 12 factors distilled from the literature. The fourteenth grouping of data deals with change factors mentioned or discussed in the data gathering process.

The data is further organized within each of these topical groupings. This second level of grouping is based on the source of the information. Cape Verdean educators' opinions are given first, generally from the ministerial down to the classroom level, followed by that of parents. The data from these Cape Verdean collaborators is followed by observation data gathered by the researcher using direct observation and participant observation. The final portion of each grouping is a discussion and analysis of the data produced in the study.

The bulk of the interviews from which the data is taken were conducted during school visits by the researcher between June 1996 and March 2003, inclusive of a comprehensive data-gathering trip in March of 2003 where the researcher again visited all the district offices and some schools on Fogo and Brava, interviewing 16 parents, 22 teachers, 19 coordinators, nine school principals, two superintendents (delegados) and two high ministry officials. The length of school visits varied from less than an hour to the entire school day. Evening and weekend events were also observed. Similarly, classroom observations lasted from a few minutes to entire lessons. Approximately 90% of the classroom observations were unannounced, and at other times the teachers were informed a day or two in advance. In this way, the day-to-day habits of teachers could be observed while still giving the teachers the opportunity to perform their best. During a seven-year time span spent living and working in Cape Verde as an

education consultant in a development project, over 500 classroom observations were conducted during regular school visits.

It is important to note that data was not always obtained from all collaborators for all topics. This is because the dominant format used for interviews was either informal or semi-structured where the flow of the interview was often determined by the collaborator rather than the interviewer and hence, not all aspects of the model were explicitly covered in every interview.

4.1. Data summary

4.1.1. Parent and community support

Interviews:

Ministry officials, coordinators, principals and teachers believe that parent and community support is necessary for a good school. One Ministry official said “Above all, parental participation doubles the responsibility for education (rather than just being a State requirement).” In Brava, where all schools have parent associations, school officials made a point of saying that they are a participative community and all parents, teachers, and administrators are responsible for their students. The drop-out and absentee rates are very low because, according to one member of the pedagogic team, “...whenever an adult sees a child in the street rather than in school, they confront the child.” Principals, when talking about their goals for the school year, often listed the creation of a school-parent association as a high priority if one does not exist. Others, when referring to ideas gained during exchange programs between school districts, said the most useful ideas were related with how to create and organize a parent association. Principals whose schools had functioning school-parent associations proudly pointed out what they have done with the community and what the community has done for the school.

But it is not only within the education system that parental participation is considered important to school effectiveness. Some parents refer to community participation as being important to a school’s effectiveness. They welcome the opportunity to help and to participate in school activities, typically student performances and the like. However, the parental view is not always so supportive. One parent said students and parents cannot go clean the school because that is the job of the local government. Another complained, “The school asks for

520ECV (about US\$5) and still keeps asking for more. Aren't they spending the money right?"

One single mother said a good school does not ask too much of parents, especially money. "A mother without a father can't do it alone."

Observations:

Schools, as expressed by principals and other school officials, traditionally tended to see parents as sources for additional revenue or for providing cheap labor. Parents in general resented this attitude and therefore kept a distance from schools. Contact between schools and parents was normally limited to yearly meetings where the parents were summoned to the school to sit sheepishly and listen to the principal lecture them. However, where parents were made to feel part of the school through participation in school activities, at the very least, this attitude changed and many became active supporters of the schools. In Ponte Verde on the northwest side of Fogo, the school had an active parents association that arranged financial support for the school through family ties with Cape Verdean immigrants living in the U.S. The parents association and the school sponsor financed the construction of a sports court. In turn, the school organized soccer tournaments with other schools. Furthermore, the principal organized for the school to offer classes in HIV awareness as well as Red Cross first aid courses for the members of the community and even bought some first aid kits for the classrooms, using funds provided by the community.

Sponsorship by family members living abroad is a typical pattern for many schools in Cape Verde. Fonsaco, on the other side of the island from Ponte Verde, arranged financing through its parents association to renovate and upgrade the students' toilets and to hook them up to the city water supply. The new facilities, replacing dirty, unused dry latrines, have become a point of pride to the school in a country where most schools have no modern toilets or even running water and so the toilets are kept clean and in good working order. Another sponsor paid for uniforms for the students, reducing obvious differences in socio-economic status visible by clothing and also reducing costs for the children's parents.

School costs, either direct or indirect, are a burden for many of the poorest families or families with little cash income. That said, problems of poverty are hard to separate from the 'the State will provide' mentality often found in parts of Cape Verde. For over 15 years the World Food

Program (WFP) had been providing hot meals for all elementary school children in Cape Verde. After this long period, the WFP decided to fade out the program in less poor schools and to make parents pay a nominal fee, the money to be used to buy supplementary food and spices and to pay the cooks in the schools. The total was about fifty U.S. cents per month, the cost of two eggs. Payments in kind were also accepted. Nearly all schools had great difficulty collecting the money, mainly because many parents questioned not the cost, but rather why they should have to pay since they never have paid before. Nonetheless, the better schools all had support from the parents and where a parents association existed, the canteen payment rate was better.

Support from parents in the better schools did not stop at financial aid. In Galineiro, also on Fogo about 15 miles from the main town of São Filipe where most teachers lived, parents began keeping track of the teachers who frequently had ‘headaches or ‘diarrhea’ on Mondays and Fridays. They took it upon themselves to talk to the teachers to improve their assiduity and punctuality. The parents association also wrote to the district superintendent, complaining about a teacher who frequently came to school drunk. They demanded disciplinary action against the teacher. In another example, the parents of the students of the school in Cova Rodela on Brava, for example, repaired all desks, windows and doors before the school year started, to the surprise and delight of the director. This initiative came from the parents alone.

In a few schools on Fogo and Brava, parental expertise was welcomed even in the classroom. Fishermen, businessmen, administrators, and even informal merchants were invited to come contribute their knowledge to the children’s instruction. In one memorable integrated science lesson, an illiterate fisherman brought some of his fishing hooks and nets and spent 45 minutes explaining his daily work to the spell-bound children. Fishermen usually have a low social status in Cape Verde, rendering this a remarkable occurrence. The children, who all live in a tiny town squeezed between the nearly vertical face of the volcano and the open ocean, had never been exposed to the daily lives of the fisherman and they were fascinated to learn the details of the lives of people they saw every day.

In Mosteiros, school principals and coordinators added an indicator “motivation” to their teacher observation form. When evaluating a teacher, the supervisors had to document the frequency of home visits wherein teachers visited the parents in their homes, including topics

discussed with the parents, in order to avoid only “negative” visits, which could be detrimental in getting parents to be more active in school.

Discussion:

All sources agreed that parent and community support is important to school effectiveness and field observations confirm this stance. Differences of opinion, however, arose over what form this support should take. What kind of role does the school see for the parents? Traditionally, school officials have attributed a supporting role for parents, such as helping with logistics, or providing money or labor. Participating in festivals and school events, paying their school fees (including canteen fees, a perpetual issue in Cape Verdean elementary schools), buying the students their uniforms and supplies, and cleaning campaigns have all been things the school has seen as desirable activities for parents. Typically, schools did not see parents as having a role pedagogically or administratively. Parents, for their part, resented being seen as a source of extra money or cheap labor for the school. Their resentment was usually expressed in a passive resistance – not coming to the school except when summoned, not paying for school supplies, uniforms, students’ lunches, and so forth. Where this relationship was different, though, schools were also noticeably better. Good schools created opportunities for parental input and participation.

Why were so many parents in most schools uncooperative? Conversations and observations gave a number of possible answers to this question. No structure such as a school board existed to allow local control of schools. School principals were nominated by the delegado, who was nominated by the ministry of education, the head of which was named by the president of the country, so there was a big gap between political processes and the functioning of the local school and therefore no local accountability. The attitude that education was a State responsibility permeated the system. In one interview a high Ministry official said, “Above all, parental participation doubles the responsibility for education” implying that the State had primary responsibility. In the U.S., local responsibility for schools is enshrined in the Constitution, and the federal government can only provide financial incentives for schools to adopt its programs, quite a contrast from the highly centralized system in Cape Verde and most of the rest of Africa. Given an exclusively top-down structure, it was not surprising that most parents saw the school as the State’s rather than as something of their own. So the normal parental resentment at just being seen as a cheap source of labor, in the case of new classroom construction and maintenance or clean-up campaigns, or of extra revenue was easy to

understand. However, schools were noticeably better in terms of cleanliness and overall condition of the facilities where the community and principal worked together, and where the parents identified with the school. This improvement of the fiscal plant can be important psychologically (Vulliamy 1987), and in terms of qualitative indicators such as attendance and drop-out rates, as was illustrated in some schools in Brava. The question naturally arises, “What happened in these schools to instill this parental ownership?” This question will be discussed below under item 14, change influences.

4.1.2. High expectations

Interviews:

Expectations, high or low, were never specifically mentioned by anyone interviewed, perhaps because it is too abstract a concept or perhaps because the expectations for the students by the teachers and for the school by the parents are so low. Indeed, the idea that some schools could be better than others was a new concept to many people interviewed, particularly parents. Some individuals did express high personal expectations, such as when one coordinator said, “Never can we be satisfied with the work we do. We have to work more with more energy in order to be able to improve and optimize our work all the time.”

Observations:

Expectations in the classroom were in general very low in terms of academic performance, in relation to U.S. or European standards. Some third graders, for example, could not write a simple sentence or read well. Most teachers expected students to not be able to answer questions and when observers were present, teachers frequently called only on two or three students, the smarter students who the teacher knew would have the correct answers. Other students were essentially ignored. Students who were repeating the year were usually seated in the back and not called on. Coordinators saw nothing wrong with a failure rate of 30%. The general attitude and belief was that students were responsible for their own learning, not the teacher. The teacher’s job was to present the material as given in the books and curricula. Poor results in the past gave the teachers no reason to expect better performance in the future, so they put less energy into the lessons, creating a vicious cycle which drove the quality downward. However, even within this generally low-expectation environment, some schools have higher levels of expectation relative to the other schools. In schools with a dynamic principal and coordinators who expected to see teachers applying a variety of methodologies,

more enthusiasm and higher expectations were visible. Engagement, dedication, and caring by the principal and teachers, all manifestations of high expectations, were visible in the best schools.

Higher expectations were visible in at least one school. The principal wanted his school to be acknowledged as the best in the district and he used this expectation to motivate his teachers to perform. Classrooms were all decorated with teacher-made didactic materials, for example. While most schools cited poverty as an excuse for not enforcing the national requirement that students and teachers wear uniforms, at this school teachers and students were all expected to wear the state-mandated uniforms. The principal checked and, when he found someone not complying, he investigated. He then used financial resources obtained through the parents association to have uniforms made for all students. Academically, the principal expected all teachers to assign homework every day and to prepare good lessons. He checked the lesson plan books whenever he observed classes.

Discussion:

Expectations can be hard to identify and measure even if one is looking for them, hence it is not surprising that the concept appears in observations but not in the interviews. It is clear that where the principal and coordinators worked hard, the teachers also worked harder and the school was better. It is equally clear that where school leadership showed his or her relatively higher expectations, the community responded. Furthermore, it is clear when a teacher challenged students and praised them when they succeeded or expressed displeasure when they did not try, the students responded by trying harder. All these behaviors were seen in the better schools. In the literature, it is generally the latter category which is associated with school effectiveness. Most reviews of U.S. literature agree that high expectations for student performance are important (e.g. Brookover 1985; Murphy, Hallinger and Mesa 1985; Walberg 1986, Levine 1990), while some refer to the importance of high expectations of teachers (e.g. Austin 1979, Northwest Regional Educational Lab 1984). Research outside the U.S. is also similar. Husen et al (1978) lists teacher expectations as a correlate of student achievement, Vulliamy (1987) reports on the importance of expectations of students and staff in New Guinea, and Lockheed and Verspoor (1991) assert the importance of clear goals and high expectations for students. Caresco et al (1996) studied schools in Uganda and also report the importance of teacher expectations for student outcomes. Teddlie and Reynolds (2000)

compare studies across 11 cultures and find teacher expectations of student performance to be positively correlated with student achievement in eight of the studies.

4.1.3. High learning time (teachers' time management)

Interviews:

Comments with regard to time spent learning were rare among the Cape Verdeans interviewed. It must be pointed out that Cape Verdean culture is generally has a more casual attitude towards time and time management than northern Europeans or North Americans. Not once was the importance of teachers' time management mentioned by school officials. However, comments about time spent in school and time lost due to interruptions were not uncommon among parents. One mother said, "The school needs another guard to keep the kids who aren't in school from disrupting everything."

Observations:

An emphasis on time spent teaching and learning was not observed. Breaks were often longer than stipulated. Indeed, visiting some schools at any time of the day would find some students playing outside unsupervised, regardless of the official class hours. Some teachers who lived close to the schools would go home for a snack and coffee during the breaks. Little regard was given to the loss of instruction time in most schools. The excursions by teachers away from the school were in part directly related to the fact that no schools had a cafeteria or a teachers' office where teachers could get a cup of coffee or keep some food. The toilet situation also provided grounds to go home during breaks, particularly for female teachers. Some schools, however, were notable in that the children were in classrooms when they were supposed to be.

Time management by teachers was also observed to be poor. In the classroom, it was common for the teacher to spend a leisurely 10 or 15 minutes at the beginning of a lesson setting things up, taking roll and doing administrative work. Rarely did teachers have a quick method for getting things started at the beginning of a lesson and even more rarely did teachers have the students work on small warm-up activities during roll call. Students were expected to sit quietly and wait. The same thing happened at the "end" of a lesson; if a teacher completed the planned lesson, which could be 20 minutes before the end of the allotted time, she either let her students have an unscheduled break or had the students sit and wait for the next lesson to start.

Discussion:

There is certainly an intuitive link to time spent learning and the amount learned, supported by a large body of research, both in the U.S. (Austin 1979; Purkey and Smith 1982 and 1983; Cohen 1983; Joyce, Hirsh and McKibin 1983; Rutter 1983; Sizemore 1983; Northwest Regional Educational Lab 1984; Brookover 1985; McCormack and Larkin 1985; Murphy, Hallinger and Mesa 1985; Levine 1991) and abroad (Sammons et al 1995 and Reynolds et al 1996 in the United Kingdom; Scheerens and Creemers 1996 in the Netherlands; Teddlie and Reynolds 2000 in a multicountry analysis; Thailand Office of the National Education Commission 1986; Office of Educational and Cultural Research and Development 1986 in Indonesia; Gunawardena 1986 in Sri Lanka; and Heneveld and Craig 1996 in their study of World Bank education projects worldwide; Caresco et al 1996 in Uganda). Students' time in school is limited, especially in developing countries with multiple shifts of students using the same facilities, and teachers need to use every available minute.

Despite the widely recognized importance of efficient use of classroom time, teachers in Cape Verde do not in general use their time wisely— indeed, poorer teachers seem to linger over administrative tasks as if they are more comfortable doing that than teaching, and administrators do not seem to be bothered by this evidence of prioritizing simple organization over instruction. This could be a significant contributing factor to the overall low performance of Cape Verdean schools. The lack of concern about time wasted during classes and during the school day itself is noteworthy. Perhaps it is the general absence of good time management to maximize learning time for students in most classrooms that makes it so obvious when it is present.

4.1.4. Class size (implying a sufficient supply of teachers and classroom space)

Interviews:

Many principals were concerned with improving their physical plant, including upgrading or adding classrooms. One innovative principal used cardboard and plywood to close off a veranda and create an additional classroom. Physical space was cited by parents and teachers as a concern, though student-teacher ratios were never mentioned.

Observations:

In comparison to many other African nations, the physical conditions and class sizes in Cape Verde were enviable. Class sizes tend to be small, and even in urban areas they were less than half the size of a typical African class. Rarely did classes have to be held outdoors, a common occurrence in continental Africa.

Discussion:

Class size was not mentioned during the interviews as a factor in school effectiveness. However, with a national average of 28 pupils per class, pupil-teacher ratios in Cape Verde tend to be low, particularly in comparison to other African countries – Mozambique, for example, has a pupil-teacher ratio of 68-1. During an international conference on education held in Fogo, one visitor from Mali exclaimed, “we dream of having schools like these.” Since rural classes tend to be smaller than the national mean, classes on Fogo and Brava are all smaller than the national average. Perhaps since this is not a concern it did not appear in the interviews. That is not to say that class size is not necessarily important; merely that it is a non-issue in Cape Verde at present. In Mozambique, Mali, and Chad by contrast, construction of classrooms is a priority in most schools and communities. There, parents frequently take the initiative and construct classrooms rather than wait for the ministry to decide to allocate some of their limited resources to that particular village or area.

The literature does not have a clear conclusion with regard to class size and pupil-teacher ratios. Fuller et al (1991) report no correlation between class size and student performance whereas others claim the opposite. For example, Case and Deaton (1997) report that class sizes would help Black students in South Africa, and Phi Delta Kappa (1980) found reductions in adult-student ratios were associated with positive school performance. The Thailand Office of the National Education Commission (1986) was more specific. They found classes “greater than 30 are more likely to have a lower promotion rate and an average achievement level” than classes smaller than 30. Warwick and Reimers (1991), on the other hand, report opposite findings in Pakistan. Despite this lack of clarity in the literature, there is no doubt that parents and educators in Cape Verde would complain if their class sizes grew very much.

4.1.5. Effective leadership/teacher supervision

Interviews:

Effective leadership and teacher supervision was considered by all within the education system, including teachers, to be of utmost importance for a school to be effective.

Coordinators frequently emphasized the importance of visiting teachers, especially those teachers lacking formal training.

The dynamism of the principal, the ability to motivate teachers and, of particular importance, the ability to motivate others to support the school, are all considered key attributes of a good principal by principals and coordinators. With respect to schools and principals, one coordinator said, “I would like to include the two things at the same time, principal/school because the school reflects the principal.”

Principals universally rated effective leadership and teacher supervision as important to school effectiveness, even though teacher supervision, in terms of classroom visits to improve teaching, was primarily the responsibility of coordinators of the district pedagogic team and not of the principal. Principals as a rule were happy when the coordinators executed many visits to the teachers of their schools and were dissatisfied when the coordinators did not come frequently. One complained, “I’m not satisfied with the work of the coordinators. The supervisory visits to the school were insufficient. The total number of visits didn’t pass ten.” Another principal was more specific as to his expectations, saying, “The coordinators responsible for the school only conducted one classroom observation. This isn’t anything near satisfactory. The other elements of the pedagogic team also visited the school at the beginning of the school year. I think that the coordinators responsible for the school need to visit the school between 12 to 14 times a year.”

Some parents mentioned school leadership as an important factor in school effectiveness, though in a more general sense and not in terms of pedagogic supervision. One mother cited “responsible administration” as a factor in a good school. Another mother said, a good school has “serious administrators who pay more attention to younger students.” Still another parent said “Tira Chapeau is a good school because there is control. The director really cares about the school.”

Observations:

Schools with a dynamic principal who provided leadership were easy to identify. The campuses were clean. There were no children hanging around outside. There was usually some sort of garden or at least plants. Teachers were teaching. In most cases, the schools were in better condition because the principal had managed to arrange funds for painting or repairs since the district budget had no money allocated for repairs. Indeed, the district office did not even have a line item in the budget for maintenance.

Pedagogic leadership was not as easy to identify during the school visits, particularly since the primary responsibility for teacher supervision lay with coordinators rather than with principals and the coordinators were not always at the schools. Further, traditionally the pedagogic team had been composed of a team of subject specialists and they were supposedly responsible for teacher supervision within their discipline. In other words, every teacher had all coordinators as their pedagogic leader. What typically happened was the team of coordinators would arrive at a school and split up to observe teachers. Since the timing of all classes is predetermined with the same subject taught simultaneously in the various classes, the coordinators ended up observing teaching in subjects other than the coordinator's area of specialization, despite their claims to be subject specialists. Teacher observation was often a power-struggle between teacher and supervisor with the coordinators being overly critical since they had the power and, rather than admit they could not help the teacher improve, they turned to attack, sometimes even to the point of criticizing the teacher's handwriting in their lesson plans. Feedback was usually the coordinator lecturing the teacher on everything he or she had done wrong, a session which on more than one occasion observed by the researcher turned into an argument. The end effect was that few teacher observations were done by coordinators – one male teacher said he had not been observed in four years – and that classroom observation and feedback was not done in a constructive manner.

The coordinators were often correct in their identification of weak lessons, but because they had no better professional training or broader exposure to different teaching methodologies, they could not provide any suggestions or guidance, only criticism. One particularly poor performance comes to mind: a 3rd grade mathematics class with triangles being the topic. The teacher started the lesson by having the students repeat “a triangle has three sides”. About 20 minutes later, he allowed the students to expand their recital to, parroting him as he said “a triangle has three sides and three angles.” Understandably, the coordinator criticized the

teacher for the boring lesson during the teacher conference which immediately followed this poor lesson. Unfortunately, since the coordinator could not identify why the lesson was bad or give suggestions on how to improve it, he just criticized in general. So a heated argument ensued.

In general, pedagogic supervision was oppressive and not supportive. Visits were infrequent and the teachers did not request more. However, innovations in some districts led to assigning one coordinator to one or several schools within a zone. The coordinators provide pedagogic input to all teachers in their zone in all subjects. Where this system is in place, teachers request classroom observation and feedback from “their” coordinator. In Mosteiros, for example, teachers began approaching ‘their’ coordinator and requested visits, something the more senior members of the pedagogic team had never experienced before.

Discussion:

School leadership and teacher supervision were widely regarded as important to effective schools by the Cape Verdean educators and observations confirm this opinion. One reason for this could be the general low-level of education and professional training of the teachers. Teacher supervision was seen as a way of giving the teachers help. Observations, though, underline the importance of the word “effective” before leadership; poor leadership, or lack of leadership in most cases, led to stagnant schools in poor condition with an unmotivated staff and alienated parents. The importance of the principal is one recurring theme in discussions with Cape Verdean educators.

Leadership as manifested in a well organized school is universally agreed upon by Cape Verdeans interviewed as a factor in school effectiveness. Leadership means more to principals than just teacher supervision. Principals are also charged with developing and implementing the school’s annual plan of activities, supervising the school canteen (including securing parental contributions and controlling stock), and, critically, obtaining additional resources for their school. This last point is perhaps the most important given the almost complete lack of material support schools receive from the Ministry and the district administration. Good leadership made a tremendous difference in the following case: The first principal was an older experienced gentleman with a kind smile and a perpetually red nose. During workshops he occasionally dozed off and in breaks he took sips from the wine bottle he brought with him in his satchel. He was nonetheless conscientious and attended training and was always present

at his school during school hours. The school under his leadership had not been painted since its construction eight years before. Teachers diligently lectured their students like they had for years. The principal did not visit classes since he knew what the teachers were doing. Parents were called upon once a year to come to the school and listen to the principal; otherwise they left the school alone.

Upon this principal's retirement, his replacement, an inexperienced but energetic young man straight out of the Instituto Pedagógico, brought new dynamism to the school. He opened the doors to the parents and helped them form a parents' association. He began visiting classes and observing teachers, jointly with the coordinator. Together, they conducted in-service training for the teachers. The school got painted with funds obtained through the parents' association. Classrooms got decorated with teacher-made didactic materials, many of which were made out of recycled materials, the techniques of which were taught in one of the in-service sessions. The school climate changed within the course of one year from being a sleepy business-as-usual school to one which the district showed as a shining example, all because of the effective leadership provided by the new principal, even though he had had no training or experience in school administration.

The bulk of the literature is very clear on the importance of the principal in school leadership and school change, appearing as a critical element in most studies in the United States from the beginning of the genre with Weber (1971) as well as in other developed countries such as England, (Mortimer et al 1988, Sammons et al 1995, and Reynolds et al 1996). Interestingly, strong leadership was not associated with school effectiveness in the Netherlands (Scheerens and Creemers 1996) and was sometimes even negatively associated.

Strong leadership may be even more important in developing countries, such as Cape Verde. Gunawardena (1986) found some studies in Sri Lanka indicating the importance of strong leadership, though he laments that the area is woefully understudied, a point valid for most countries in the developing world. Warwick and Reimers (1991) differentiate between administration and leadership, with administration being bureaucratic whereas leadership is dynamic. They also note the important influence school heads have on student outcomes.

Respect for authority is a very strong feature in Cape Verdean culture. Teacher supervisors establish their hierarchical superiority and authority through classroom visits. Dutch researcher

Geert Hofstede (1991) theorized that cultures have four dimensions: power distance, individualism, masculinity, and uncertainty avoidance. Respect for authority he included in a dimension he called “power distance,” which he defines as how a culture or society handles inequality. The higher the rating on power distance, the higher the dependence of subordinates on bosses. “In the large power distance situation, superiors and subordinates consider each other as existentially unequal...”(p. 35) and “subordinates expect to be told what to do” (p. 37). Though Cape Verde was not one of the countries he studied, the culture exhibits the characteristics associated with high power distance, including personal use of public resources by bosses, such as happened when one delegado brought a new television and video player home and three years later, when he left his post, his replacement was struggling to get them back. Abuses such as this and those documented by Caresco et al (1996) in Uganda would simply not be tolerated in countries with less power distance. This is consistent with Hofstede’s cultural theory. On the other hand, coordinators, principals and teachers said they favored a participative style of leadership, one which can “enable innovation.” Interesting research could be done to investigate the relationships between school effectiveness and cultural parameters, such as the role of the principal and power distance ratings.

In the Cape Verdean school system, there was a division of labor between school leadership and teacher (or pedagogic) supervision; between evaluating and coaching teachers. The school leader was the principal and he or she was chiefly an administrator who was continually present on the campus. Teacher supervision was the responsibility of coordinators who, in the traditional system, periodically visited the school to observe teachers and conducted in-service training and used principal input for final evaluation. Mosteiros adopted a different approach where the coordinators’ main work place was the schools with weekly trips to the district office to coordinate with other coordinators. This change meant the coordinators conducted more classroom observations, were more accessible to the teachers and were not as dependent on transportation, which was often a problem. The change in structure also allowed coordinators and teachers to build up a relationship, reducing the stress of classroom observations from yearly evaluation visits to frequent discussions about teaching. Coordinators were also involved in parent-teacher conferences. Some set up a room where they could be consulted during the day and where in-service training sessions took place (Fonseca). That way, in-service was on-going and was linked to identified needs. Again, effectiveness of a school is linked not just to classroom observation and supervision of teachers, but the quality of that

supervision. Traditional supervision by poorly trained supervisors was identified as being more likely counterproductive than helpful.

4.1.6. A capable teaching force (educated, trained and experienced)

Interviews:

Trained (qualified) teachers are universally agreed upon as a factor in school effectiveness. Having a 100% trained teaching force is a concrete goal of the Ministry of Education in Cape Verde. No reasons are given except the implicit understanding that trained teachers (no matter what the training, it seems) are better. Teachers with lower levels of training are often embarrassed when asked what their level of professional preparation is. They usually reply, “only...” in a somewhat downcast tone. Parents in general are not informed about the specifics of the teachers’ levels of education, though since the towns are small and everyone knows everyone else, they do know who has attended secondary school and who graduated from the Instituto Pedagógico.

Experience was also highly valued. Coordinators and principals wanted to take the teachers’ training and experience into account when doing an evaluation. They wanted each classroom observation form to have a space on the top for writing in teacher’s level of training and years of experience and had a difficult time in trying to impartially rate a teacher based on teaching performance rather than on bureaucratic criteria.

The importance given to training and experience extends beyond emphasis on teachers. Principals and coordinators also highlighted the importance of their training in order to more effectively run schools and help teachers, even though no official training existed in the country. The only training provided was through development aid projects.

A few principals mentioned as a high priority for following year to improve the functioning of the teachers’ pedagogic nucleus, a formal structure for teachers to plan and work together on Saturday mornings. In most schools in Cape Verde the pedagogic nucleus does not exist except on paper, since no meetings are held. This structure is intended to allow more experienced teachers to help their less experienced colleagues. It is also a forum for coordinators to use to provide in-service training.

Parents agreed that good teachers were essential, though there may have been some lack of agreement as to what a “good” teacher was. A good teacher “helps the children,” according to one student’s mother. Another said that a good teacher “doesn’t make the children clean the classroom,” whereas a third said a good teacher “needs to be responsible.” It was clear that parental interpretations of a good teacher vary quite a bit, though comments were focused on practical aspects of teachers’ work rather than on bureaucratic aspects of training and certification.

Observations:

Many Cape Verdeans, particularly in administration, make no distinction between a good teacher and a trained teacher, ignoring the fact that the teacher training given in Cape Verde is generally of a very low quality, being overly theoretical and not practical. One training program, for example, featured secondary teachers who monotonously lectured elementary teachers, telling them what should be done in class. Some of the best lessons observed by the researcher were conducted by teachers without much of formal pedagogic training and classroom experience. What these teachers had in common was a strong interest in helping the children to learn.

Here are some examples of teachers with “only” the minimal first phase of training:

Anita, a teacher in a school in Vila Nova Sintra on the island of Brava, regularly went out to restaurants on Saturday and Sunday nights to collect leftover plastic plates, forks and knives which she used to make didactic materials with her students. She also made portfolios for each one of her students, each one featuring a special cartoon character on the front cover, selected by the individual student, even though she had never been introduced to portfolio assessment. She explained that the student’s fear of this particular folder, containing grades, tests, works by the student, was diminished by letting them choose their own decorations.

Benvinda, also in Vila Nova Sintra, had the birthdays of all students posted on the wall. Each student’s birthday was celebrated at the end of each month, with parents providing cookies and juice. Benvinda and the students decorated the classroom together for the event.

Joaquim, a teacher in Nossa Senhora de Monte on Brava, taught math classes with a wide variety of didactic material that he made himself, usually using waste materials such as empty tin cans or paper packaging.

Isabel, a teacher in Fonseca, a school in Mosteiros on Fogo, started a fund to be supplied by the students of her class. With the money she collected, she bought pens and pencils, guaranteeing that every child had the necessary materials.

Rosa, also in Fonseca, went to the local health post, got a first aid kit and established a first aid drawer in her classroom after attending a course on first aid. Rosa also used recycled materials to create didactic materials to decorate her classroom. Furthermore, she established an afternoon tutorial session in her own house, which was just up the hill from the school, for students with difficulties. Since she has 4 small children herself that she had to look after, her solution was the most pragmatic available. In addition, she visited each of the student's houses once a month to talk to the parents about progress and about remaining problems. In this way she stimulated parents to become more active in their children's academic lives and in school affairs in general.

Discussion:

A teacher's training and experience were regarded as important to school effectiveness according to the Cape Verdean educators interviewed, though what is meant by a good teacher varied somewhat from group to group. The Ministry definition is bureaucratic: training and a paper certification. Principals and coordinators mostly share this definition as well, though some look at the teacher's work, such as punctuality, having lesson plans, and so forth. Others, though very few, consider the teacher's interaction with the children as being the defining point of a good teacher. Parents, on the other hand, see and hear what their children tell them and form their opinions based on direct contact with the teachers.

Observation, however, did not confirm the official stance concerning trained and experienced teachers. Many of the best classes observed were conducted by teachers with lower levels of training and sometimes less experience. One of the reasons for this lack of agreement lies in the nature of the training many teachers received. Spending a few hours on a Saturday morning sitting on a bench in a classroom being told how to teach is not a very effective form of training, but that is exactly what happened during the Ministry-sponsored teacher-training

campaigns (financed by a World Bank loan). Teacher training, even in such institutions as the Instituto Pedagógico, is heavy on theory with little time left to practice. Equally bad, teacher trainers rarely demonstrate good teaching practices. Practical advice and tips on what to do with the children are not really given. On the other hand, many of the teachers do not have very high levels of schooling themselves, in some cases barely above the level they are supposed to teach, so there is a need to make sure they have mastered the material they are supposed to teach. Even though Portuguese was not the first language of the researcher, he noticed many grammatical errors made by teachers during lessons and at times had to restrain himself from going up to the blackboard and correcting the teacher's math.

The bulk of the literature in the United States and other developed countries is based on research done in schools where all teachers have relatively high levels of education, most with university degrees, so there is no base for comparison to the average Cape Verdean school. In the past 20 years there has been a great deal of effort to train all teachers in the developing world, partly as a result of the World Bank's publishing its *Education Sector Policy Paper* in 1980. But crash-courses in teaching do not provide the depth of knowledge or give the practical tools to teach effectively. Fuller (1990) argues that these mass training programs are a waste of resources and it would be better to have short pre-service sessions for new teachers followed by in-service during the school year. The relatively high mobility of teachers in Cape Verde would support such a teacher preparation strategy. Many young teachers are in the classroom only because they could not find other employment and view it as a way station until something better comes along rather than a long-term profession. This relatively high mobility aggravates teacher-recruitment problems in more isolated areas of the country. Young people are drawn to cities where there is more to do and they think their chances of advancement are better. The higher the education level they have, the better their chances, so there is a tendency for the high school graduates to leave the more isolated places and move to the cities. The fact that the teacher training institutes in Cape Verde are also located in the two main cities, Praia and Mindelo, exacerbates this tendency. Nearly all teachers in those two cities have complete certification; most teachers in São Filipe, Brava and Mosteiros do not. In fact, every year Brava and Mosteiros have to hire new teachers with no pedagogic training and sometimes not even having completed high school while there are unemployed Instituto Pedagógico trained teachers in Praia who are unwilling to work in rural or isolated areas.

Experience is also a two-edged sword. The old saying, “practice makes perfect,” can be used to highlight the problem. Practice makes perfect only if the form practiced is the correct one. Practice makes consistent would be a more accurate expression. In the case of teaching, experienced teachers have been teaching the same way for years; the more experienced, the deeper the habits have become ingrained. Consequently, the deeper the habits, the harder they are to change. Indeed, Tan et al (1997) found no correlation between student outcomes and teacher experience. Observations in Cape Verde tend to support Tan et al, in that the best lessons observed were conducted by untrained teachers, in contradiction to the general opinion held by Cape Verdean educators.

4.1.7. High time-in-school

Interviews:

Personnel inside the school system never mentioned anything about time, either time in school or learning time. However, the highly centralized system in which they worked may have limited their perception of an effective school to factors they had some influence over, and the official school calendar and hourly program are not within their influence. When asked directly about the factor time in school, opinions varied. Some teachers said too much time in school would make the children tired or bored and unable to learn. Others said time was important because “sometimes the student runs into difficulties that will obligate the teacher to undertake the maximum effort to do what the student can to reach the appropriate level” and that it increased children’s opportunity to hear, review and remember more content. Yet another teacher said that more time in school made students more “ligado” (linked) to school than if they were to stay at home.

Some parents implicitly underlined the importance of maximizing the time for learning through their complaints about interrupted classes. One mother clearly made this point when she said, “A good school is one where classes actually take place and aren’t cancelled all the time for various reasons.

Observations:

When driving from São Filipe to Mosteiros, a drive of 60km but which takes over an hour on a cobbled road curving its way around the mountain, the road passes by roughly 10 schools. Despite the official school starting time of 8:00 a.m., it was not uncommon to see students arriving up to a half an hour late, walking on the road on their way to school, or to see students playing outside, waiting for the teacher. At noon, nearing the hour of release for the morning students and the beginning of afternoon classes, the road was sometimes crowded with students going home after school and students heading to class, signifying early release for the morning students.

Teacher punctuality was worse in some schools than in others. Many of the teachers of the school in Cova Figueira live in São Felipe, despite the hour commute. None of the teachers have their own cars, forcing them to depend on the irregular local traffic, most of which travels to São Filipe early in the morning. As noon approaches, morning-shift teachers rush to the windows of their classrooms whenever they hear a car approaching, hoping to wave down a ride home. The same thing happens late in the afternoon. Not only does this interrupt class, it also, if the teacher is successful in getting a ride, shortens the school day.

Discussion:

Little information was gathered on this factor during the interviews, perhaps because in the highly centralized Cape Verdean education system, local educators do not have any influence over the school program and calendar. This can be interpreted as possible evidence for subconscious filtering in their replies in this and in other factors. In Cape Verde, as is the case in most of the developing world and Africa in particular, infrastructural limitations force schools to have two or three shifts of students. Increasing the school day is simply not possible because without electricity there is no way to continue classes after dusk. Also, a safety issue arises if students as young as 6 years old were to be required to walk long distances in the dark. In addition, boredom and fatigue, as some teachers pointed out, can be real concerns since most lessons are rote-oriented, schools have neither heat nor air conditioning, and many students do not get more than their evening meal, so they are hungry and tire easily. Increasing the school day may not produce any added benefits. The alternative would be to extend the school calendar. Either proposal may have unintended negative consequences in terms of student enrolment and attendance, particularly for girls. Children, usually girls but sometimes boys, have responsibilities in the home such as getting water, gathering firewood, looking after

animals, looking after younger siblings, or cooking. Water is usually carried from the nearest public water supply on the women and girls' heads, with little tins for little girls, graduating up to 20 liter plastic buckets for bigger girls and women; it is very tiring and time consuming. Boys usually do not have this chore unless the family has a donkey to be herded. If additional time in school would overly reduce the time available for household chores, it is likely that parents would keep one or more child home to take care of these chores, thereby undercutting the potential benefits of additional instruction time for these children.

In Pakistan, Warwick and Reimers (1991) and in Sri Lanka, Gunwardena (1986) report positive correlations between teaching time and student outcomes. Gunwardena, echoing what is the case in Cape Verde, found teacher absenteeism had the biggest impact on teaching time, with high absenteeism reducing instruction time. Heneveld and Craig (1996) also found a positive correlation in their study of World Bank education projects in the Third World. It must be pointed out that no absolute instruction time is given, only relative. Eisemon et al (1990), on the other hand, report that additional instructional time did not contribute to higher student outcomes. Observations in Cape Verde would tend to agree with Eisemon et al, in that given the normal 5 hours of un-stimulating, rote-memorization lessons, an additional hour or two would not do any good.

4.1.8. An orderly learning environment

Interviews:

An orderly learning environment was frequently cited as an important factor in school effectiveness. One principal said it was a "palpable indicator" of school effectiveness, despite being difficult to classify or measure. Appropriately decorated classrooms and an attractive school were also listed as factors in school effectiveness by educators interviewed.

Parents were more specific in their thoughts about the importance of an orderly learning environment. One mother was concerned with her small child. "The school should protect the smaller children, there should be discipline." Another mother was more general in her opinion of an orderly environment, saying, "A school should keep the big kids from beating up the smaller kids, and should keep the kids who aren't in school off of school property so they don't mess things up (make a pig-sty of the school)."

Many parents complained about adults and kids on school grounds who shouldn't be there: "The school needs another guard to keep the kids who aren't in school from disrupting everything." One parent in an urban area said, "The community wouldn't use the wall to relieve themselves if the area was illuminated. And the school needs more than one guard per shift."

Observations:

An orderly environment was present in classrooms but not always in the school. This paradox was the result of strict discipline in classrooms but often no supervision outside of the classrooms. Most schools did not have perimeter walls or fencing, so anyone could enter at any time. It wasn't uncommon to see a herd of goats passing through, even in more urban schools. In the better schools, the school grounds and buildings were better maintained. "Fica bonita," or staying pretty, is a very important feature in Cape Verdean culture and in schools where the faculty and community identified themselves with the school, they applied this priority as well.

During all the observations conducted over seven years, not once was disorderly behavior on the part of the students observed. This should hardly be surprising, considering the typical classroom atmosphere. Teachers often walked around with a ruler in their hand, ready to strike if need be. Corporal and other forms of physical punishment were used. Ear pulling was apparently a favorite means of controlling or punishing students. Teachers grabbing students by the arm to pull them or physically move them was frequently observed. Another common form of discipline seen was for teachers to "manda para rua" or send the students to stand outside the classroom. Negative reinforcement and even humiliation in front of the class were also observed. All these teacher behaviors were considered normal by Cape Verdean educators, as long as the students were not really hurt.

Discussion:

The data gathered indicates Cape Verdeans agree that an orderly learning environment is an important factor in an effective school. However, in most cases the classroom environment was very strict, sometimes even to the point of being oppressive. A classroom environment conducive to learning has received much attention in the U.S. and other developed countries. The original five-factor model of school effectiveness developed in the U.S. lists an orderly, pleasant environment (Purkey and Smith 1982, 1983), which would preclude an oppressive

classroom. Scheerens and Creemers (1996) report similar findings in The Netherlands. Teddlie and Reynolds (2000) go farther, including an emphasis on positive reinforcement among their process factors for school effectiveness. Unfortunately, little is published about classroom environments in developing countries, a reflection of the reliance on quantitative methodologies in studies of Third World schools and the subsequent lack of qualitative data.

Not all classrooms in Cape Verde were oppressive. The more dynamic teachers also used strict discipline, but used more varied forms of positive feedback rather than just the usual nod or lack of negative feedback. Hugs, pats on the backs and lots of smiles were used, along with encouraging words.

4.1.9. Adequate material support (textbooks and furniture, etc.),

Interviews:

Material support was considered a very important factor in school effectiveness by the ministry officials, coordinators, principals, and teachers. Ministry officials underlined the importance of physical conditions, saying “Results of training can only be seen in the students in the medium term, but teachers’ use of more materials can be seen immediately.” Coordinators talked very positively about the training they had recently received and in turn passed on to teachers in how to prepare didactic materials.

Most principals, when asked to describe their ideal school, recited an extensive list of materials needed in their school. One female principal in a school that is in very good condition discussed the needs of her school: financial support which could be used for office equipment such as a computer, photocopier, among others. She also states the need for a sports area and repairing the student toilets.

Teachers also universally expressed the need for more didactic materials, either teacher-made or provided by the school.

Furthermore, parents’ complaints about the poor physical conditions in the schools reveal the importance they place on material conditions in the schools. Commonly heard were such basic problems as leaking roofs, unpainted and dirty walls, and kids urinating in the school yard. Functioning infrastructure, preservation of the school resources such as sufficient furniture, for

example, nicely painted walls, were all factors given by parents as important to a school's effectiveness.

Observations:

Didactic materials used for instruction were scarce, apart from textbooks and a blackboard which was often merely a rectangle of wall in the front of the classroom which had been painted black. Some of the imported plastic blackboards were too slick and the chalk would not write properly on them and so the students could not read what was written. Apart from the blackboard, walls were frequently decorated with a variety of teacher-made posters and various posters published by international health organizations giving advice on health and hygiene or children's rights. Rarely were these posters referred to during lessons, even the teacher-made ones, so it is difficult to consider these more than decorations.

More innovative teachers made use of whatever materials were locally available. Stones were used for mathematics classes. Puppets were made from rags and scraps of cloth. Bottle caps were used to make Scrabble games or for math lessons. Empty match boxes were glued together to make model furniture and the like. Empty bottles and tins were used in many imaginative ways by the minority of teachers who invested more of their time in lesson preparation. Sometimes the teachers spent their own money on didactic resources. One teacher bought materials to make posters which he used to make didactic materials to decorate his classroom and use in lessons. His teacher-made posters nearly covered the chipped pink walls in colorful contrast to the broken-down and faded wooden desks for the students. This particular teacher had a 10th grade education with no pedagogic training and was in his first year of teaching at the time of the observation. Yet, he spent his own money on school supplies and carried them an hour and a half up the mountain to his school.

Didactic materials provided to the school, either through an international aid agency such as UNICEF or through a school patron, were rarely used. Despite an oft repeated complaint about the lack of teaching materials, what materials that existed were under lock and key of the principal in many schools. Teachers were not allowed to use them for fear the materials would be damaged or lost. In one case, a principal had shelves full of student textbooks in his office. When asked what he was doing with all the books, he replied that the books were to replace those lost by students, but since many students did not have any money to buy them, he did not know what to do with the books. In response to a follow-up question as to whether the

students all had books, he said, no, they did not. Some schools, however, such as Fonsaco in Mosteiros, had catalogued the didactic materials available – from skulls and anatomic models of the human body to guitars and drums – and used a check-out system to ensure that the materials were returned in good condition. In addition, with funds raised by the community they converted one room into a mini-library and used a check-out system to loan books. Unfortunately, such administrative organization was rare.

Discussion:

Intuitively, it is easy to see that adequate teaching materials are essential for good teaching, a point which everyone interviewed would agree and observation supported this. A lack of materials tended to reinforce teacher-centered approaches where the teacher stood in front of the class and talked practically non-stop. A minimal amount of didactic material, even in the hands of a poor teacher, at least allowed students to see something besides the teacher. Didactic materials in the hands of a good teacher allowed the students to actually work with the material and solve some problems on their own. Interestingly, observations showed a causal relationship between didactic materials and good teachers. Having didactic materials in a class did not create good teachers, rather good teachers created didactic materials to use.

Research in Thailand (Thailand Office of the National Education Commission 1986) found the use of didactic materials did improve student outcomes and they cited better resources and availability of more materials to be advantages of larger schools. Gunawardena (1986) links teaching strategies with teacher preparation, particularly in terms of the teacher's ability to make effective use of the curricular materials, something which, in Cape Verde, could be extended to include the actual making of didactic materials, not just the use of provided materials.

4.1.10. Teacher attitude and behavior

Interviews:

Teacher attitude and behavior were considered important to a school's effectiveness by all groups. According to one Ministry official, one of the most important and visible behaviors is that the teachers work more with the students directly. Principals were more concrete about what they considered to be good teacher attitude and behavior, namely: a teacher who is attentive to the needs of the children, assiduous and punctual, participates in all school

activities, and who always make an annual plan and lesson plans; “in short, is organized.”

Another principal listed the following characteristics of a good teacher: “Concerns himself a lot with the school, does everything requested, cooperates and is always ready to help, and uses active teaching methods.”

Teachers were less specific about what they considered proper teacher attitude and behavior when interviewed. However, a number of year ago teachers were involved in preparing their own evaluation criteria and classroom observation forms. In a series of participative workshops, teachers created their own ideal profile which included being punctual, dynamic, modern, always ready to learn new techniques, supportive of colleagues, friendly, open, firm, impartial, knowledgeable about what they were teaching, and innovative.

Parents had less to say about proper teacher behavior in the context of the school. One parent said that teachers’ respecting students is an important part so that way the students will respect the teachers. Another parent said teachers with a sense of vocation were better.

Observations:

There was a wide range of teacher attitudes and behaviors observed, which is unsurprising. Typical teacher behavior in the classroom, however, tended to be formal and even aloof. For example, during one math class the teacher wrote some problems on the blackboard for the students to complete in their exercise books. While they were working, he walked around monitoring their work. But when he saw something he did not like on their papers, he pointed it out with his arm and finger fully extended, not even bending at the waist to get closer to the student. Other classroom observations, though, revealed warm, friendly teacher behavior with the teachers and students laughing together.

Teacher behavior outside of class tended to be on a friendlier basis and less formal.

Unfortunately, there were reported cases of teachers impregnating students, even in the upper elementary grades.

Discussion:

One of the most striking things about education in Africa is the uniformity of teaching strategies typically used. Africa has hundreds of different cultures and ethnic groups and differing histories. But despite this variety, classes in Mali are run the same way as classes in

Mozambique. Teachers say the same things in the same way in Guinea Bissau and Cape Verde. Teachers stand in front of their class, be it a cement and stone structure built with USAID funds or one of sticks and straw built by the community. They read or recite to the students, expecting them to write every word in their exercise books. Teachers copy text or problems onto the board and expect students to copy them into their own exercise books, even though the very same text and problems are in the students' textbooks. Questions are asked to the class as a whole, eliciting a choral response. Students sit the entire lesson, except to stand when the teacher comes in or when called individually to go to the blackboard to write something, complete a sentence, conjugate a verb, or solve a math problem. One favorite technique to make sure students are paying attention during one of the teacher monologues is to pause halfway through a word and have the students finish the word.

4.1.11. Homework

Interviews:

Homework was not a theme in the discussions. One principal talked about his school's policy of homework every night. A few teachers mentioned homework as important, but only a few. One mentioned homework as a means of formative evaluation, which perhaps reveals that the teachers do not trust the students to be able to learn on their own.

Observations:

Homework was frequently assigned, often corrected in class. However, homework was not used effectively. The quantity was often very little. In math, two or three simple problems, often given in the textbooks as sample problems, were assigned as homework. In Portuguese, students had to complete some sentences. Sometimes homework consisted of merely transcribing paragraphs from the textbooks into the students' workbooks. Science homework was rarely assigned. One teacher used homework to introduce new material and could not understand why the students failed to do it correctly.

Discussion:

Scheerens and Creemers (1996) report finding positive correlations between homework and student outcomes in The Netherlands. Teddlie and Reynolds (2000) found positive correlations between homework and student performance in four of eleven cultures studied (Hong Kong, Hungary, Israel and Japan) and a negative correlation in one of the eleven

compared (British Columbia, Canada). Husen et al (1978) used assignment of homework as a proxy for teacher behavior in a quantitative meta-analysis of studies and found no correlation. Heneveld and Craig (1996), on the other hand, report a link between assigning, completing and giving feedback to homework and student learning. Caresco et al (1996), using Heneveld and Craig's model as a framework for a study in Uganda, found, "schools that scored high on the achievement test, also scored high on our assessment index" (p. 21), which was based on teachers' assigning homework and giving feedback to students. If assigning homework is seen as a way to extend the instructional day and that more time spent learning results in better student performance, then it follows that proper use of homework will result in students learning more. The operative word, then, is 'proper' since observations revealed improper use of homework or such minimal use of homework that students did not benefit from it. The best use of homework was as an extension of the lesson of the day. It was then corrected and feedback given to students, a cycle not often seen in Cape Verde.

4.1.12. Frequent assessment/monitoring of student progress

Interviews:

Assessment and monitoring of student progress was not mentioned directly in any of the interviews. One possible reason could be because the final exam schedule is dictated by the ministry or perhaps because testing is not used as a monitoring device which gives feedback to the teacher, letting him or her know what needs to be re-taught. Curricula are taught straight through with no deviation permitted, even if the students did not master the material. The general attitude is that it is the students' responsibility to learn, not the teachers' to teach.

Observation:

Teachers rarely administered teacher-made tests to monitor student progress. The common form of monitoring student progress was to call students one at a time to the blackboard during the lesson to solve some problem or correct some sentence. However, despite the small class sizes, it was rarely possible for all students to show their progress during one lesson, even if solving one problem or writing one sentence could truly show a student's progress. Therefore some students did not get assessed, usually the repeaters who were almost invariably seated in the back of the classroom.

There were some exceptions. One teacher in Vila Nova Sintra, Anita, developed a system of portfolio assessment which was later adopted by other teachers as a result of a teacher exchange.

During final exams, it was frequently observed that teachers prompted students to give the right answers – broad hints at times, overtly helping the students during exams.

Discussion:

Monitoring of student progress does not appear to have a priority to Cape Verdean educators, in general. The educators interviewed did not express this as being important and testing or effectively monitoring student progress was rarely observed. The teacher in Brava who let the children choose their own cover decorations for their personal files was one of the few cases where a teacher tried to use assessment to adjust teaching. In most cases, student learning was the student's responsibility and a test is exactly that, a test, rather than a means of measuring progress and identifying difficulties. Re-teaching because of poor student progress was rarely done. Monitoring of student progress is a theme that appears frequently in U.S. literature (Purkey and Smith 1982; Sweeney 1982; Joyce, Hersh and McKibin 1983; Ralph and Fennessey 1983; Sizemore 1983; Northwest Regional Educational Lab 1984; Brookover 1985; McCormack-Larkin 1985; Murphy, Hallinger and Mesa 1985; Walberg 1986; Levine 1991), the logic being that if teachers identify problems early enough, they can re-teach or take other steps to ensure that students do not get hopelessly behind. Reynolds et al (1996) also include monitoring of student progress in their list of school effectiveness factors in England. Teddlie and Reynolds (2000) found monitoring of pupil progress to be a common trait identified in U.S. and English school effectiveness literature. However, monitoring of student progress does not seem to be one of the things normally looked at in research in developing countries, though Heneveld and Craig (1996) did include the factor in their school effectiveness findings.

There might be good reason to not include formal evaluation in developing countries. In Cape Verde, during final exams it was frequently observed that the teachers prompted the students to give the right answers. That could mean that the teachers themselves did either not trust the assessment instrument, did not want to be evaluated themselves by having too many student fail or did simply reject this kind of evaluation, thus cheating and helping skew the results.

4.1.13. Other factors

The theoretical framework used for this study left open the possibility that other factors which are not mentioned frequently in the published literature also contribute to school effectiveness in the opinions of the sources interviewed. The most commonly cited factors are infrastructure, adequate financial resources, independence, communication, and motivated students, each of which is presented and discussed below.

Infrastructure

Interviews:

Adequate infrastructure was the most frequently mentioned school effectiveness factor, exceeding all the previously listed factors. Almost every principal talked about lack of specific facilities in their schools, everything from inadequate numbers of classrooms to no latrine. High on the list for many principals was a sports area. “We are now diligently working to arrange some financing for the construction of a sports area,” announced one principal.

A different principal provided a more complete list of what he wanted for his school: “Electrification of the entire school, construction of an additional classroom, creation of a school garden, roofing one existing space to create a mini-library, and hooking the plumbing to the public water supply so the school has water.” One mother only referred to physical infrastructure when talking about a good school – having a canteen, bathrooms, nicely painted walls, desks in serviceable condition, which was not an uncommon understanding of the word ‘good’. Student outcomes rarely were considered when talking with parents.

Observation:

One principal’s drive to be the best school in the district of Mosteiros led other schools to also strive harder. A newly arrived principal in a school located up the side of the mountain raised funds to improve the appearance of the school. What had been bare dirt and stones soon boasted flowers and banana trees – the fruit of which was sold to finance other school activities. He also arranged funds to build a small office for the principal. In Mosteiros, over a 2-year period all principals raised funds to build office spaces for themselves since the schools were originally built without any provision for office space, making Mosteiros the first district in the country to have offices for all principals.

Discussion:

The case for infrastructure being an important factor in school effectiveness was never made in the United States, probably because infrastructural conditions are usually more than adequate. In fact, Weber (1971) reports that outstanding physical facilities do not correlate with increased student learning, while Phi Delta Kappa (1980) reports that resource and facility manipulations alone are insufficient to affect school or program outcomes. Warwick and Reimers (1991) also report finding no correlation between student outcomes and physical school facilities, “however desperate they may be” (p. 12). Other research in the developing countries (Vulliamy 1987), however, indicates that infrastructure is an issue in school effectiveness in places where it cannot be taken for granted that a school actually has classrooms, desks, chairs and a blackboard.

As was pointed out previously, infrastructural conditions in Cape Verdean schools are much better than one finds on continental Africa; schools almost always have at least two classrooms made of brick or stone, they have lockable doors and at least rudimentary furniture. Students are out of the elements, though broken window panes still let in winter’s cold winds, as well as dust. But Cape Verdean educators want their schools to be more than just these simple rooms. They want libraries, toilets with running water, electricity, an office for the administration to work out of, storage space for teachers so they can lock up their materials to keep them safe, a sports place so the students can have a place for physical education and to play, and so forth. These are not what one would call luxuries and certainly are all infrastructures which would enhance the educational program.

All of the above also demonstrated how much all those directors put into improving infrastructure which links up with school leadership. Infrastructural improvements mirror engagement and the will to improve, which was consequently seen also in pedagogical behavior. First, however, was the apparent need to improve the tangible. Only then were they ready to tackle the more difficult problem of improving teaching.

Adequate financial resources

Interviews:

Adequate financial resources was also mentioned frequently as an important factor in school

effectiveness. According to one principal, his colleagues in São Filipe and Mosteiros put great effort in the search for support from outside sources. A different principal said his number one priority for the school year was “mobilization of partners.” Parents, for their part, complained that they were called upon to pay for things in the school.

Observation:

Much of the principals’ energy was spent trying to arrange funding since they received very little from the Ministry. In fact, one of the chief objectives of school principals in creating a parents association for the school was to arrange financial sponsorship. In one school with a more dynamic principal, the school bought a refrigerator and leased space to fishermen to store their catch. The school also markets fish and produce from the school garden to provide additional funds, which so far have been used to buy school uniforms and soccer balls for physical education.

Discussion

Most Cape Verdean schools do not have their own financial resources from the Ministry and are therefore dependent on financial support from the community or other sponsors. Where financial support was available, the schools seemed to flourish. In general, schools with dynamic principals were more likely to arrange extra financial resources, as was explained in the first topic above Parental Support. In cases where dynamic principals did arrange funding, they almost always used it to improve the physical condition of the school. The school in Relva was painted because of money provided by a patron in the U.S. Ponte Verde used funds to build a sports court. Fonsaco used donated money to provide running water to the toilets.

Towards the end of the study, the delegado of Brava decentralized the districts’ funding, in that the central administration divided its discretionary funds among all of the schools, giving the principals discretionary power over whatever funds were available. This was a revolutionary action on the part of the delegado and one greeted with great enthusiasm by the principals. Unfortunately, the experiment began too late for its effects to be evaluated in this study. Also, since none of the schools had a discretionary budget, it is not possible to assess how well this money would be used by principals in general, nor the level of malfeasance that may occur. But there was never any evidence of improper behavior on the part of those dynamic principals who arranged outside financial support for their schools.

Independence or Autonomy

In the Cape Verdean school system, school principals have little power over resources that could be used to shape their schools. Most power lies with the delegado in the district office. Schools do not usually have their own budget and school principals are not usually involved in selecting the teachers that will work at the school, this normally being the delegado's decision. Some principals think that decentralizing many functions to them, along with the resources to execute them, would result in improved schools. There is some literature supporting this opinion. Purkey and Smith (1982) found flexibility and autonomy to be contributing factors in the United States while Heneveld and Craig (1996) report the same in the developing world, particularly with regard to local power to make decisions. Observations in Cape Verde show that where the principal was dynamic and was allowed to make decisions, the school prospered. The delegado in Brava, though, began allowing principals to select their own staff, another experiment too recent to evaluate in this paper. However, flexibility and autonomy are not alone sufficient. Without some level of basic resourcing, locally-made decisions cannot be implemented.

Communication with parents and with the Ministry

Good communication was named by some principals and coordinators as being a contributing factor to school effectiveness. Specifically, they mentioned communication between the school and the parents and the school and the Ministry. Traditionally, communication in both cases has been very one-way: school to parents and Ministry to school. The researcher participated in numerous meetings between principals and parents, often a ritual imposed on the principals and parents rather than a true medium for communication. The principal usually sat at the head of the room behind a table with other dignitaries, if present. Parents dutifully sat in the desks and chairs provided and, if these proved insufficient as was often the case, they stood lining the walls and even looking through the windows and doors, though this only in extreme case. Despite the formal nature and one-way communication, the level of interest and even concern by the parents was high. For the most part, principals, unfortunately, often did not know how else to communicate with parents. Some, however, found ways. These more effective principals visited parents at home, they invited parents to social gatherings, they stopped and talked with parents on the street when passing, all methods much more informal and therefore easier to allow two-way communication. Opening the school to parental input

has improved some schools, such as the case where the parents complained about absenteeism amongst certain teachers. Research by Heneveld and Craig (1996) found effective communication between teachers and parents to contribute to school effectiveness, supporting the inclusion of this point in a school effectiveness framework.

Effective transmission of schools' day-to-day problems to the Ministry would most likely help the formulation of policy and allocation of resources, though that goes beyond the scope of this study. The typical form of communication between the Ministry and the districts was via fax. The Ministry faxed documents or some request for information to the district office. The district office faxed responses back. Meetings were held in Praia a few times each year where the delegados were summoned to meet with the Minister. While the researcher was not privileged to participate in these meetings, he interviewed several of the delegados after the meetings, and they were reported to be formal affairs.

Visits to the schools by Ministry officials, especially the Minister, were rare enough to be treated as major events where the district went to great lengths to show their best side, with performances by selected students, visits to spruced-up schools, and so forth. Unfortunately, school visits by the inspection department, the department of the ministry charged with guaranteeing the educational quality, were not very frequent because of lack of resources. When carried out, these visits tended to be bureaucratic inspections using one-way communication and were not used as a means for discussing problems in local schools or their locally-developed solutions, if any, to be transmitted to the central ministry.

Motivated students

Some teachers and principals named having motivated students as a key element in school effectiveness. No doubt, motivated students are easier to teach and they learn more rapidly. But the comment gives an important insight, in that the educators do not see it as their responsibility to motivate the students. Either the students come to school motivated or they do not. This mentality goes hand-in-hand with the previously discussed issue of teachers not taking responsibility for student learning. In school effectiveness research in the U.S. teachers' motivating students was identified as a factor (Brookover 1985), a perspective shared by this researcher whose observation showed that teachers who made an effort to motivate students had more lively classes with greater student participation. In the developing world, Indonesia

(Office of Educational and Cultural Research and Development 1986) classified achievement motivation as positive student characteristics, whereas in neighboring Thailand (Thailand Office of the National Education Commission 1986) a teacher's ability to motivate students was considered an important characteristic of an effective school.

4.1.14. Change factors

Some of the data used for this study came from a series of focal group discussions and interviews conducted in the context of a mission to evaluate the impact of a development aid project that had as its objective qualitative improvement in Cape Verdean elementary schools. In addition to school effectiveness, change processes were also discussed. Cape Verdean educators were asked to recall how they had done specific things, such as teacher supervision, before the project began and compare that to how they were doing it at the time of the interview. Follow-up questions probed what specifically caused change in behavior, if any occurred. The information presented was gathered during semi-structured discussions and interviews, though unlike the school effectiveness framework, no specific explicit framework for school change was used to organize the information. What these educators learned, why they changed, and what they applied may also be related to what they believe to be important, which reflects their underlying beliefs as to what an effective school is.

According to Ministry officials the most important factor in school improvement was the implementation of systematic monitoring of teacher performance. Naturally training was also important, but that was part of the overall systemic change and was viewed as part and parcel of a greater objective rather than as an objective in itself.

For coordinators, the most important change influence was interaction with other coordinators. Specifically, coordinators participated in yearly "intercâmbios" or exchanges with other districts and that provided them with opportunities to learn from one another, to visit other islands and other schools. But there was no agreement as to exactly what was learned as each seemed to have learned something different, or at least found one of the many things they learned to be more important and influential. One coordinator learned a pedagogic game involving making fish out of paper, with each fish have a letter written on it, and using a pole, string and a hook to try to fish the letters out of a basket and use them to form a word or sentence. Another coordinator talked about the archive system he learned to organize his

teacher records. Still a third pointed out how much he learned just by being in a different district and seeing how they organized themselves as a team. A fourth pointed to the teacher observation form and how one pedagogic team had modified the standard form to include other aspects of teacher performance, such as the number of home visits the teacher had done.

Direct training they received was not mentioned as an influence on their work as often as the exchanges. When asked directly, many did say they benefited from training and mentioned some topics, including computer operation, classroom observation techniques, and how to create didactic materials from waste, but there was no agreement on what was the most influential topic. None of them could explain why they worked differently than in previous years, but all felt they were more effective in their work. One proudly exclaimed that the teachers are more open and receptive to classroom visits.

School principals, on the other hand, almost all talked about how important the training they had received was to their work. But like the coordinators, there was no agreement on the most influential topic. One principal listed the themes he had received training in over the past several years: planning of activities; a different method of observing classes; using classroom observation forms; conducting teacher conferences to give feedback in a different way; teaching based on structured phases in lessons, including watching videos of lessons; new method for elaborating lesson plans, concluding “I learned quite a bit.” A second principal was more general, saying he had benefited from training in school administration, while another said the training he had received in school administration enabled him to be more practical and more organized, specifically learning how to elaborate projects and how to moderate. Yet another principal said, “The process of pedagogic supervision has improved significantly because of the training I received. Application of the classroom observation forms elaborated through the project have permitted better classroom observation,” according to one principal. Still another principal also pointed to the importance of the improved classroom observation processes, saying, “The classroom observation forms elaborated through the project have helped me significantly in monitoring teachers and in organizing my own work.”

Teachers received training through the principals and coordinators. Some teachers praised the additional support they were receiving from coordinators, more and better in-service training – such as one on the lesson cycle using videos of their colleagues, more active principals, and support from the community. But change factors per se were not discussed.

Discussion:

Trying to analyze change from the collaborators' personal perspective is a difficult task. For one thing, the coordinators, principals and teachers were often not aware of changes in their behavior – they worked hard now but they always worked hard, for example. More specific questions were often needed to try and draw information from them, but the specific questions then had the consequence of influencing the response, normally with the effect of limiting it. For example, with the more specific questions the answer was often formed using the same words as were used in the question, no matter how many different ways were tried. Indirect questioning was not always successful, either. In general, questions tended to get superficial responses which required many probing follow-up questions. The follow-up questions were based on the researcher's interest and therefore probed aspects important to him, aspects which may not always reflect the interviewee's priorities and interest.

The primary focus of the research was at the school and district level, so discussion of change at the Ministry level was only theoretical and not based on any concrete examples. The pedagogic teams, however, being responsible for changes in teacher behavior were an important intermediary group and therefore received training, coaching and other in-service activities, which they in turn transmitted to the teachers. But even they did not always realize they had changed, if they had. When a change is internalized, it is difficult to remember how things were done before. But change was apparent to outside observers. For example, coordinators who had in past years started off post-observation teacher conferences by criticizing the lesson just observed, now started by asking the teacher what the teacher thought about the lesson. The coordinators did not, however, realize they had changed their behavior until given the opportunity to reflect upon it. Since the new form of teacher conferencing had become the norm in several districts, it was difficult for some of the coordinators to recall how it had been done several years before. Further, since the change of behavior had become so internalized, it was now the 'right' way to do it and thinking of different ways was difficult. From their perspective, they still observe classes, and they still give the teacher feedback, which is what they had always been doing. The fact that they now receive requests for observation from teachers can be attributed to their own personalities or their hard work and not just to a change in their behavior. Outsiders can see change more readily than insiders.

At school level, two major forces emerged which had the greatest influence on changing principal's behavior, namely: training of all involved in a wide variety of themes, and "intercâmbios" or exchanges between schools and districts – a form of training, but very practice-based.

The stability of principals, while also low in that they tended to change frequently, was not as low as that of coordinators, so most of the principals had received more training over the previous years simply because they had been in their position longer. It follows then, that the training they received had greater impact and therefore was more directly attributable to changes in their behavior. But it was also interesting that there was an overall lack of agreement on what theme or seminar was the most important, or which had the greatest impact on any individual. Follow-up questions, approaching the topic from different directions, even turning the question over to a group of coordinators and principals did not produce a consensus. They were asked, both individually and collectively, to name specific tasks and describe how they did them. Common tasks, such as teacher supervision and teacher in-service training, were done differently than they had been done years before. When analyzed in this way, they realized that they all had adopted a participative approach to their work which was much more collaborative than what they had traditionally used. Teacher supervision had become a cooperative effort involving the principal and the teacher. In-service workshops used a more Socratic method, with a lot of brainstorming and participation by the teachers, rather than the traditional lecture-based workshops of old. But no one had mentioned this type of teaching method as an important theme in the training they had received. More questioning revealed that they had never explicitly been taught participative methodology. Rather, they had internalized it because the training they had received had all been highly participative and used the same methodology. So the individual themes taught to them did not have the same influence or impact as the cumulative effects of being continually and consistently exposed to participative methodologies.

It is also telling that better equipment was not credited for change in teachers' work.

In sum, the experience in Cape Verde shows that traditional thinking on school improvement in the Third World, specifically the construction of classrooms, provision of materials, and training of teachers, needs to be refined. Principals and the community need to be included in the process. Training needs to be provided using methodologies the teachers should later use

and the training should be practice-oriented, rather than merely certification or content-oriented. Shortage of didactic materials can be at least partially overcome by training teachers to make their own. But none of the above alone is sufficient. A consistent approach covering multiple factors needs to be used.

5. Conclusions and Recommendations

This chapter presents conclusions and recommendations based on the analysis of the data presented in Chapter 4, thus answering the research questions raised at the beginning of this paper. Two major research questions were posed: (1) Does the model of school effectiveness from developed countries fit Third World schools in Cape Verde? And (2) What are interventions which can bring about changes in Cape Verdean schools? A short summary of the data and its analysis follows, in which each aspect of the theoretical framework is analyzed in terms of the data gathered and the literature on school effectiveness. Finally, recommendations for fostering school change and improvement in Cape Verde are given.

The data collected through interviews, group discussions and observations presented in Chapter 4 tend to confirm most of the theoretical framework developed from an analysis of the literature, as presented in Chapter 2, but not completely. The primary findings in each of the school effectiveness factors are as follows:

- **Parent and community support** was a factor cited by all groups interviewed as an important factor in school effectiveness, though some parents expressed reservations. Parent associations and sponsors provided school uniforms and other material support, as well as increased expectations for school performance. Parental support sometimes extended beyond support functions, such as when a group of parents went above an ineffective principal's head and appealed to the district superintendent to intervene in the case of a habitually drunken teacher. Observations confirmed the general positive role of parental support in school effectiveness.
- **High expectations** for student performance, something that loomed large early on in school effectiveness research, particularly in the United States, was not identified by the interviewees as being important, perhaps because "expectations" is an abstract concept. Observations showed that overall expectations for student performance were very low, but engagement, dedication, and caring by the principal and teachers, manifestations of expectations for the educational staff, all contributed to making the school more effective. Therefore, though the absolute level of expectations for students was in general low throughout the country, the schools where the expectations for staff were relatively high seemed to perform better.
- **High learning time**, indicating the amount of time spent by students in school on task, was considered important by parents, with the other groups not mentioning this

factor. Observations confirmed the parental wisdom that teachers who spent more time in class teaching enhanced student performance.

- **Class size**, a school effectiveness factor sometimes cited as being important in other parts of the world, was considered by principals as important though other groups did not mention it. Observations support that small class sizes contribute to a schools' effectiveness, though Cape Verdean classes are already small by African standards.
- **Effective leadership** was universally considered the key to a good school among all groups interviewed and repeatedly confirmed by observation. Effective leadership usually led to better relations with the community and more community support, more resources, cleaner and better facilities, and a more dynamic faculty and staff.
- **A capable or trained teaching force** was considered to be essential to school effectiveness by the Cape Verdean school administrators interviewed. However, parents and teachers did not mention this factor. Upper level administration considered "trained" and "capable" as synonymous, though observations tended to show that they were not. Capable teachers were clearly beneficial to schools and students, but they were not necessarily the result of the training provided. Observations showed that many "trained" teachers were not as capable as some of their less trained colleagues.
- **High learning time** was also not mentioned by educators, whereas parents frequently expressed a concern about wasted time during the school day. Observations confirm the parents' intuitive understanding of the importance of starting school on time, avoiding interruptions during the day, and not canceling scheduled school days are important to a school's effectiveness. In effective schools, students were in class on time and did not leave early, and excessive or habitual teacher absences were not tolerated.
- **An orderly learning environment** was cited by principals and parents as being important. For the parents the link between an orderly learning environment and time spent learning was clear, something that observations confirmed.
- **Adequate material support** was another factor strongly supported by educators close to the classroom level, the importance of which was substantiated through observations. By developed country standards, material support in Cape Verdean schools was overall inadequate, but those schools which had managed to procure more support were more effective.

- **Teacher's attitude** was judged an important factor by most people interviewed at all levels. Some parents were very specific as to what they considered to be an appropriate attitude for teachers. Observations confirmed the importance of this factor.
- **Homework** was also nearly universally considered important to school effectiveness among those interviewed, though observations showed that homework was sometimes under or improperly utilized and in those cases did not contribute to student learning. Homework was often menial, such as copying text, or minimal, such as assigning only one or two simple problems. Assignments were not always corrected and normally no feedback was given to students.
- The final factor of the framework, **frequent monitoring of student progress**, did not surface as important with any of the groups interviewed. Observations showed little was done in terms of adequately and systematically monitoring student progress.
- **Infrastructure**, a factor not frequently cited in the literature, was nearly universally rated as an important element at all levels interviewed. Observations supported this opinion.

Table 5.1 presents an overview of the findings. The first column lists the elements of the theoretical framework and the other columns indicate whether the data provided from the various sources tended to confirm the framework (+) or contradict the framework (-). A plus-minus (+/-) indicates no clear opinion from the source. Areas where no data were obtained are left blank in the table. Furthermore, since the last category is a collection of factors originating from the interviewees, no attribution as to which group made the suggestion is made.

Table 5.1. Data summary table

Factor	Ministry	Coordinators	Principals	Teachers	Parents	Observations
1. Parent and community support	+	+	+	+	+/-	+
2. High expectations						+
3. High learning time					+	+
4. Class size			+			+
5. Effective leadership/teacher supervision	+	+	+	+	+	+
6. A capable teaching force (trained)	+	+	+			+/-
7. High time-in-school				+/-	+	+
8. An orderly learning environment			+		+	+
9. Adequate material support		+	+	+		+
10. Teacher attitude and behavior		+	+	+	+	+
11. Homework		+	+	+	+/-	+/-
12. Frequent assessment/monitoring of student progress						+/-

While the research findings do confirm much of the theoretical framework, some factors were not identified as being important while a few others were added. High expectations, high learning time, class size, high time-in-school, and frequent monitoring of student progress were not considered important by all but a few of those interviewed, if any. Observation did not always agree with the interviews on these points, finding high expectations and high learning time important. Nor did observation always agree with the importance given to teacher qualification, for example, with numerous examples of less trained teachers being more effective. Other points considered important to the Cape Verdeans interviewed but which did not appear in the original framework include: infrastructure, financial resources, independence, communication, and motivated students.

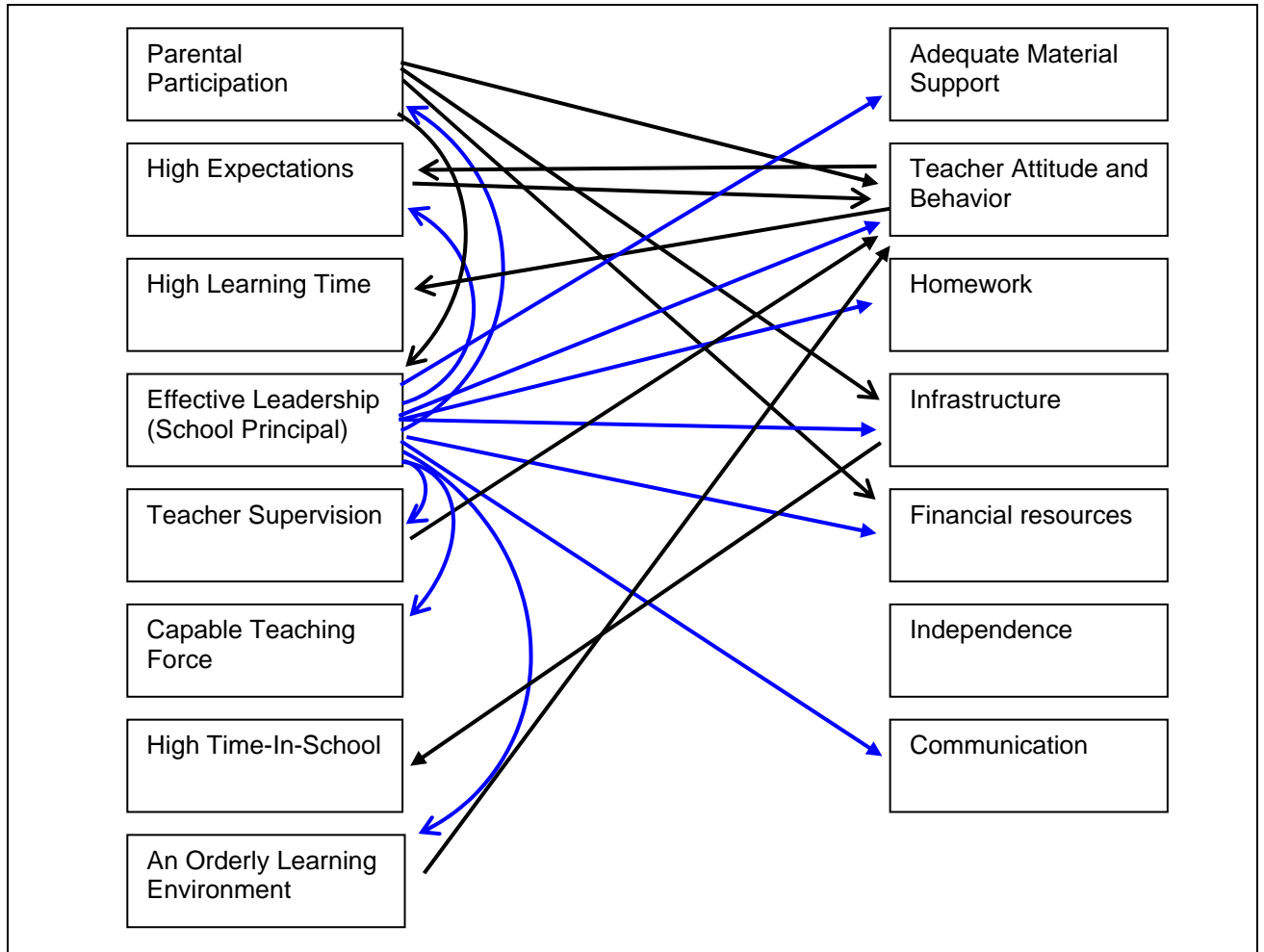
Notably, no factors were considered completely negative. Some collaborators pointed out some negative aspects of some factors, such as parent and community support and homework, but they were balanced by other collaborators referring to them as positive factors. Perhaps this can be attributed to the methodology used, in that the interviews and conversations were

generally positive, often in the context of future plans and visions for the school. In such a context, negative influences were not specifically discussed except as obstacles to overcome in pursuit of a goal of a better school. The researcher did not suggest topics or possible factors, so not all factors were discussed with all collaborators.

The different factors of school effectiveness in the framework do not exist independently of one another and the interrelationships between them are important in developing a strategy for school improvement. In the data gathered, parental involvement depends largely on the school principal and contributes to financial and infrastructural improvements of the school. The principal's leadership sets the tone in terms of expectations for teachers and students. High learning time is influenced by teacher quality, with better teachers making better use of available instruction time or even extending available time through after-school tutorials, which is in turn influenced by teacher supervision. Class size depends on physical space (infrastructure) and teacher supply, which are partially within the influence of the principal. Teacher quality depends on teacher education, experience, and pedagogic supervision, but an inverse relationship between teacher levels of education and the need for pedagogic supervision was not found. High time-in-school depends on infrastructure and teacher supply, though improving teacher assiduity and punctuality to reduce wastage depend on effective leadership. An orderly learning environment depends on effective leadership and a capable teaching force. Adequate material support, at least in the schools studied, depends less on the Ministry than on parental support. Teacher attitude and behavior is influenced by parental support, school leadership, pedagogic leadership, and the teacher's own training and experience. Homework depends on expectations set by the principal and by teachers' training and experience. Two additional factors considered important in the schools studied, infrastructure and financial resources, are dependent on the Ministry and foreign aid, but enhanced by parental participation, which is usually brought about through dynamic leadership by the school principal.

A visualization of the various relationships between the factors identified in the study shows the key role of the principal in school effectiveness. The diagram does not weight the various factors in importance or influence; it shows which factors influence and are influenced by other factors. To improve clarity, the lines of influence from school leadership are blue, the others are all black.

Diagram 5.1: Interrelationship between School Effectiveness Factors



The diagram shows that effective leadership affects nearly all other factors without itself being affected by the others except parental input. But even in those cases, effective leadership is required for parental participation because no adequate structure for parental participation exists in the Cape Verdean education system. The lack of an adequate structure means parental participation depends on the principal. In order to maximize the leverage for school change, changes in principal behavior would seem to have the most effects. Research in the U.S. confirms this hypothesis.

So what would an effective school in Cape Verde look like, according to the Cape Verdeans interviewed? Based on the data gathered, an effective school would have sufficient classrooms, toilets with running water for the teachers and students, electricity in all rooms, a sports area and perhaps a mini-library and an office for the principal. It would be clean, painted inside and out, and not have stray children or animals running around during the school day. The roof would have no holes in it and the windows would all be glazed. The classrooms

would have sufficient desks, a blackboard, and a lockable storage area for the teachers to use. The walls of the classroom would be decorated with posters and other visual aids or didactic materials. Textbooks and other didactic material would be plentiful.

The school would be run by a dynamic principal who supervises his teachers, and works with the parents association, not only to arrange additional support for the school, either financial or material, but to involve them more in normal school life. The parents association would be active in school events, such as festivals, cultural or sports events, and would go to the principal with their concerns. The teachers would be trained and have some experience, would be dynamic and willing to adopt new teaching methods, would use prepared lesson plans, would know how to create their own didactic materials, would be kind and caring to the children but maintain good discipline, start class on time and would visit parents in their homes on a regular basis. The teachers would receive regular classroom visits and observations from the coordinator and the principal, as well as in-service training and workshops several times per year. The students would be dressed in their uniforms, quiet, and motivated to learn.

How would Cape Verdeans go about creating such a school? Looking at schools which match the above description and talking to those involved in these schools, it is obvious that the starting point for such a school is the principal. Dynamic and devoted to his school, expecting support from teachers and parents to make the dream school a reality, he works to create this support. He goes to the community and helps them organize an association to work with the school. He goes to community leaders or others who might be in the position to arrange financial help for the school. He systematizes his work, using forms and archives, to keep track of parental contributions, teacher absences, inventory, and other administrative tasks. He utilizes resources obtained for the betterment of the school as a whole, not for his own benefit. He prioritizes improving the school environment through repairing, painting and improving infrastructure. Improvements in the school environment provide a strong motivational boost to parents, teachers and students. The changes in working environment also increase the morale of teachers, students and parents, keeping them more willing to tackle the more difficult tasks. Changes in the more difficult and less tangible factors, such as teaching practices, are not the first priority since he recognizes it takes much longer and he needs the help of the pedagogic team. This he gets in the form of a coordinator who is at the school, observing and giving helpful feedback to teachers and providing in-service training.

5.1. Reflections on the Research

The differences between the data gathered from Cape Verdeans through interviews did not always agree with that gathered by observations. Some of the difference could come from differences in background which create observer bias. The observer was a foreigner with a background in education who worked in this field in numerous countries. In addition, intense exposure to school effectiveness literature may have given him a predilection to look for specific characteristics or to look at particular behaviors in a different way than the Cape Verdean's interviewed. By contrast, most Cape Verdeans have not finished secondary school and none of the teachers or principals have university degrees. While many Cape Verdeans have traveled to the United States or Europe, none have worked in schools there or in any other country. They also have very limited experience with education systems in other developing countries. So the collaborators and researchers may have had different perspectives on each of the factors of the framework. However, since the researcher is aware of this phenomenon, he consciously tried to present the Cape Verdean view in this paper.

One fundamental difference in perspective revolved around the very definition of an effective school. The researcher always had in the back of his mind that a school's effectiveness is determined by its ability to teach students in an optimal way – an outcomes-based definition of school effectiveness. However, in only two instances did people interviewed refer to student outcomes. One parent summarized it quite well: “A good school should give the children an education.” In addition, one ministry official said, “The child has to be the focus of change in the school,” but did not go into specifics. This sentiment was also not reflected in the discussions in the schools and the districts. Each group had the most to say about factors which were closest to them. The Ministry's comments tended towards systemic issues, such as teacher certification. Coordinators' comments were mostly concerned with pedagogic processes, such as didactic materials. Principals' comments focused on the school as an institution, such as infrastructural improvement. Parental comments centered on the children, such as concerns about safety.

5.2. Recommendations

The findings presented in this paper have implications for increasing the impact of school improvement efforts in Cape Verde. It is recommended that future interventions take the following factors into consideration:

- The primary focus needs to be on improving school **leadership** through empowering and improving the principal. Recruiting highly motivated people is an essential step, one that needs to be complemented with hands-on training and coaching, so they can fulfill their new role. Since leadership is an important factor in school effectiveness and the principal is the key to school improvement, specific attention to the principal needs to be given.
- The **community** should be involved in local school governance to increase local accountability. Parents play an important role in not only motivating their children to attend school and to learn, but can also provide oversight of the day-to-day performance of the school. In addition, they can be an important resource for school functioning and improvement, if properly organized.
- **Infrastructure** needs to be improved, based on local determination of needs. If the school is to become part of the community rather than something of the State, then the staff and parents should be involved in identifying infrastructure needs, such as toilets, sports areas and additional classrooms.
- **Decentralized, practice-oriented training** for teachers, both pre-service and in-service training, needs to be emphasized with such themes as time management, creation and use of didactic materials and the lesson cycle, with frequent follow-up and coaching in lieu of formal training in centralized institutions.
- **Teacher supervisors** must be trained to assist the teachers in the acquisition and application of innovative teaching methods. In this way, innovation can become an expectation for teachers and a criterion for teacher evaluation. Feedback to teachers needs to be given in a positive, supportive manner.
- The innovative efforts in school autonomy, including provision of a school budget and staff selection by the principal, recently introduced in Brava, should be monitored as they could provide further direction for school improvement. A small fund for discretionary spending can greatly enhance other factors, such as paper and tape for didactic materials, screws to fix chairs and desks, or paint for routine maintenance. Research in the United States suggests that one of the important means a principal has to bring about change in a school is through staff selection.

5.3. Suggestions for further research

While several schools which meet the Cape Verdean criteria for school effectiveness exist on Fogo and Brava, they have not been around very long, at least not in their current state. Therefore it was not possible to compare Cape Verdean ideas of an effective school as described in Chapter 4 above and Western concepts revolving around student outcomes. Further studies of those schools meeting the Cape Verdean criteria for school effectiveness could be done to corroborate the researcher's belief that those schools will have better indicators of student performance and therefore also match concepts of school effectiveness common in developed countries. A longitudinal study in selected schools comparing the development of the school effectiveness factors discussed above with qualitative measures of student performance, such as passing, drop-out, and primary completion rates or advancement to secondary schools, where available, might provide insights as to how these factors influence student learning.

Another study could analyze the stability of school effectiveness based on the Cape Verdean concepts by looking at schools previously identified as meeting the criteria of an effective school but which have had a change in principal over the past several years.

Additionally, it might be interesting to investigate links between cultural dimensions, such as those presented by Hofstede (1991) and school effectiveness factors, since nearly four decades of research have not produced a single recipe that has been found for making a school effective. The current study points to a possible relationship between school leadership and power-distance, one aspect of culture. The relationship could be studied in more depth, including research on other cultural dimensions in order to see if there are specific school effectiveness factors which vary in relation to cultural aspects.

Finally, because the generalizability of this study is limited to Cape Verde, research using a similar approach should be conducted in other countries with similar educational and social contexts to look for commonalities. Findings from such studies could be used in conjunction with the proposed cultural studies above to possibly create a matrix of likely school effectiveness factors based on certain cultural dimensions.

5.4. Summary

This study looks at the appropriateness of using Western models of school effectiveness for school improvement in the developing world, specifically Cape Verde. Two major research questions are posed: (1) Does the model of school effectiveness from developed countries fit Third World schools in Cape Verde? and (2) What are interventions which can bring about changes in Cape Verdean schools? The context is described and a brief history of elementary education in Cape Verde is given. The overall low quality of education in the country is presented as the basic problem to be analyzed. A review of the published literature on school effectiveness yields a theoretical framework of 12 school effectiveness factors. Qualitative data that had been collected over a seven-year period is used to analyze each of the 12 factors of school effectiveness in the theoretical framework, along with an open thirteenth category which allows for other factors locally important to be added to the framework. A final section discusses change influences identified by the people interviewed.

The findings of the research show that many of the school effectiveness factors identified in the literature are also valid in Cape Verde, but not all. Most important are parent and community support, leadership and teacher supervision, a capable teaching force, teacher behavior and attitude, as well as adequate material support. In addition to the literature-derived factors, good infrastructure is deemed important to most people interviewed and many people point to the importance of schools having sufficient locally-managed financial resources.

An analysis of some of the relationships between these factors points out the utmost importance of the school principal in school effectiveness. The data collected on school change tends to confirm this important role and identifies the school principal as the key to school change. Recommendations given based on the data analysis include: emphasizing the school principal as key to school effectiveness and school improvement, involving the community in local school governance, using decentralized in-service teacher training, including locally-determined infrastructural improvements, and decentralizing to the schools at least some fiscal resources.

Finally, several suggests are given for additional research in school effectiveness in developing countries, specifically linking it to student outcomes.

Appendices

Appendix A: Cape Verde Map and Demographic Information

Appendix B: Comparison of US School Effective Schools Research Summaries and Reviews

Appendix A: Cape Verde Map and Demographic Information



Cape Verde Demographic Information (Source: GEDSE 1999)

Surface area: 4,033 km²

Population: 426 276 (1999)

Population growth rate: 2,5% per year

Population Density: 106 people per km² (1999)

Per capita GNP: 1080 US\$ (1998)

Literacy rate: 83.8% (1998)

45% of the population is less than 15 years of age, 55% less than 20

Net primary school enrollment: 91% (GEDSE, 1998) to 98% (UNESCO 1999)

Correlates, Indicators and/or Characteristic of Effective Schools	Levine (1991)	Walberg (1986)	Brookover (1985)	McCormack-Larkin (1985)	Murphy, Hallinger and Mesa (1985)	Northwest Regional Educational Lab (1984)	Cohen (1983)	Joyce, Hersh and McKibin (1983)	Purkey and Smith (1983)	Ralph and Fennessey (1983)	Rutter (1983)	Purkey and Smith (1982)	Sweeney (1982)	Clark, Lotto and McCarthy (1980)	Austin (1979)
- appropriate pacing and alignment (goals, objectives, content & activities, and assessment)	x			x			x	x							
- active/enriched learning	x										x				
- emphasis on higher order learning in assessing instructional outcomes	x														
- superior coordination of curricula and instruction	x			x	x		x								
- availability and abundance of appropriate instructional materials	x														
- superior classroom adaptation of curriculum materials and instructional methods	x														
- creation of time for reading, language, and math	x			x											
Highly operationalized expectations and requirements for students	Major	x	x	x	x			x	x	x	x	x			x
Other possible correlates															
- student sense of efficacy	x		x												x
- emphasis on multicultural instruction and sensitivity	x														
- emphasis on the personal development of students	x														
- rigorous and equitable student promotion policies and practices.	x														
Ideology of the School			Major												
Organizational Structure of the School			Major												
- minimal stratification of students			x												
-minimal differentiation of instructional program for different groups			x	x											
Instructional Practices of the School			Major												
-structured direct instruction			x	x	x		x								
-academic group competition for peer learning and motivation			x												
- reinforcement principles employed			x												
-strong sense of student identification and affiliation				x											
-curriculum featuring grade-level expectations and standards in reading, math and language				x		x									
- use of the accelerated learning approach (more than one years' growth planned)				x											

Correlates, Indicators and/or Characteristic of Effective Schools	Levine (1991)	Walberg (1986)	Brookover (1985)	McCormack-Larkin (1985)	Murphy, Hallinger and Mesa (1985)	Northwest Regional Educational Lab (1984)	Cohen (1983)	Joyce, Hersh and McKibin (1983)	Purkey and Smith (1983)	Ralph and Fennessey (1983)	Rutter (1983)	Purkey and Smith (1982)	Sweeney (1982)	Clark, Lotto and McCarthy (1980)	Austin (1979)
- reading, math and language instruction beginning in kindergarten				X											
-precise and informative report card				X											
-utilization of test-taking preparation and skills				X											
- clearly defined homework policy explained to students and parents				X											
- emphasis on regular school attendance				X											
- clear communication of school expectations to parents				X											
- increase parental awareness of community services available to reinforce and extend student learning				X											
- structured staff development					X										
- (opportunity for) student involvement, responsibility					X			X			X				
- discipline is firm and consistent (effective)						X					X		X		
- high expectations for quality instruction						X									
- high expectations pervade the organization						X									
- policies and procedures support excellence in student performance						X									
Appropriate sequencing of curriculum from year to year						X									
The use of Effective classroom teaching practices							Major								
- teachers have high sense of efficacy							X								
- business-like, task-oriented environments							X				X				
- student accountability							X								
- teachers organized and prepared							X								
Coordination and Management of the instructional program at the building level							Major								
- principal leadership, especially in goal setting							X								
School effectiveness depends on the generation of a sense of shared values and culture among both students and staff							Major								
- clear academic and social behavior goals								X	X			X			
- teacher efficacy								X							
- pervasive caring								X							
- administrative leadership								X		X		X		X	X

Correlates, Indicators and/or Characteristic of Effective Schools	Levine (1991)	Walberg (1986)	Brookover (1985)	McCormack-Larkin (1985)	Murphy, Hallinger and Mesa (1985)	Northwest Regional Educational Lab (1984)	Cohen (1983)	Joyce, Hersh and McKibin (1983)	Purkey and Smith (1983)	Ralph and Fennessey (1983)	Rutter (1983)	Purkey and Smith (1982)	Sweeney (1982)	Clark, Lotto and McCarthy (1980)	Austin (1979)
- frequent and monitored homework								X							
- variety of teaching strategies								X							
- school site management									X						X
- staff stability									X						
- curriculum articulation and organization									X						
- schoolwide staff development									X			X	X	X	
- district support									X						
- sense of community							X		X						
- appropriate degree of structure in lessons											X			X	
- high proportion of teacher time spent in whole-class instruction											X				
- lessons begin and end on time											X				
- clear feedback to students on both expectations and performance											X				
- good working conditions											X				
- a pleasant and positive atmosphere											X				
- effective and interesting teaching											X				
- schoolwide sets of values and norms of behavior											X				
- high staff morale												X			
- considerable degree of staff control over instructional and training decisions in the school												X	X		
- alignment between school goals and professional development														X	
- reduced student/teacher ratios														X	
- special funds available for successful schools and programs														X	
- clearly stated goals and objectives														X	
- individualized instruction														X	
- high expectations by principal of teachers and student performance															X
- warm, responsive teachers															
- teachers feeling they can experiment															
- teacher-made tests and teacher judgment used for student assessment															

Works Cited

- Abdulmalik, Hassan Ali, David W. Chapman (1992). "Teacher Nationality and Classroom Practice in the Republic of Yemen." Improving the Efficiency of Educational Systems report, USAID.
- ADEA (1998). ADEA Newsletter, Vol. 10, No. 3. Association for the Development of Education in Africa.
- ADEA (1999). *Prospective, Stocktaking Review of Education in Africa*. Draft Synthesis for 1999 Biennial Meeting.
- Adipah, Benjamin et al (1995). *A Tale of Two Ghanas: The View from the Classroom*. CRIQPEG Research Report, USAID.
- Afonso, Natercio Augusto Garção (1993). *The Reform of School Administration in Portugal: A Case Study in Organizational Politics*. Unpublished doctoral dissertation. Boston University School of Education.
- African Development Fund (1996). "Appraisal Report, Education Project II, Republic of Cape Verde." October 1996.
- Alexander and Windham, Eds. (1982). *Education and Development*. Lexington, MA: Lexington Books.
- Anderson, C. S. (1982). "The Search for School Climate: A Review of the Research." *Review of Educational Research*, Vol.52, pp. 368-420.
- Anderson, Lascelles and Douglas M. Windham (1982). *Education and Development Issues in the Analysis and Planning of Postcolonial Societies*. Lexington, MA: Lexington Books.
- Angelides, Panayiotis and Mel Ainscow (2000). "Making Sense of the Role of Culture in School Improvement." *School Effectiveness and School Improvement*, Vol. 11, No. 2, pp. 145-163.
- Austin, Gilbert R. (1979). "Exemplary Schools and the Search for Effectiveness." *Educational Leadership*, Vol. 37, No. 1, pp. 10-14.
- Avalos, Beatrice (1980). "Teacher Effectiveness: Research in the Third World – Highlights of a Review." *Comparative Education*, Vol. 16, No. 1, pp. 45-53.
- Avalos, Beatrice and Wadi Haddad (1981). "A Review of teacher Effectiveness Research in Africa, India, Latin America, Middle East, Malaysia, Philippines, and Thailand: Synthesis of Results." IDRC Manuscript Rreport No. IDRC-MR10.
- Barnes, Victor A. (1982). "A Review of Literature on Efficiencies in Primary Education for Sub-Saharan Africa." Unpublished monograph, USAID.
- Barreto, Adla Lima (1994). *Die Grundschule der Kapverden im Wandel. Positionen zum Erwerb der Amtssprache Portugiesisch im Anfangsunterricht – Voraussetzungen*,

- Problem, Lehrmaterialien*. Doctoral Dissertation, Mülhausen Pedagogical College, Erfurt, Germany.
- Bennell, Paul and Dominic Furlong (1998). "Has Jomtien Made any Difference? Trends in Donor Funding for Education and Basic Education Since the Late 1980s". *World Development*, Vol. 26, No. 1, pp. 45-59.
- Bitter, Patrizia (1995). *Das Bildungssystem von Cabo Verde: Neue Perspektiven*. Unpublished doctoral dissertation, Universität Wien, Austria.
- Bliss, James R., William A. Firestone, and Craig E. Richards (1990). *Rethinking Effective Schools: Research and Practice*. Englewood Cliffs, NJ: Prentice Hall.
- Bor, Wout van den (1985). "Problematical Aspects of Expatriate Educational Research with and in Developing Countries." *International Journal of Educational Development*, Vol. 5, No. 3, pp. 167-181.
- Boyd, William Lowe (1991). "What Makes Ghetto Schools Succeed or Fail?" *Teachers College Record*, Vol. 92, No. 3, pp. 331-361.
- Bray, Mark (1986). *Education and Society in Africa*. Worcester, UK: Billings & Sons Ltd.
- Brock-Utne, Birgit (1996). "Reliability and Validity in Qualitative Research Within Education in Africa" *International Review of Education*, Vol. 42, No. 6, pp. 605-621.
- Brookover, Wilbur B. (1985). "Can We Make Schools Effective for Minority Students?" *Journal of Negro Education*, Vol. 54, No. 3, pp. 257-268.
- Brookover, Wilbur B. and Lawrence W. Lezotte (1979). "Changes in School Characteristics Coincident with Changes in Student Achievement." Michigan State University.
- Brookover, Beady, Flood and Schweitzer (1979). Changes in School Characteristics Coincident With Changes in Student Achievement. Occasional Paper No. 17. RIE, May, 1980.
- California State Department of Education (1980). *Report on the Special Studies of Selected ECE Schools with Increasing and Decreasing Reading Scores*. Office of Program Evaluation and Research, California Department of Education.
- Carasco Joseph F. et al (1996). *Factors Influencing Effectiveness in Primary Schools: A Baseline Study*. Kampala: Uganda National Examinations Board.
- Carter, Samuel Casey (2000). *No Excuses: Lessons from 21 High-Performing, High-Poverty Schools*. Washington, D.C.: The Heritage Foundation.
- Case, Anne, and Angus Deaton (1997). "School Quality and Educational Outcomes in South Africa." Institute for Policy Reform Working Paper.
- Cerych, Ladislav (1967). *Problems of Aid to Education in Developing Countries*. New York: Frederick a. Praeger, Publishers.

- Chapman, David W. (1991). Education Data Quality in the Third World: A Five Country Study. *Internationale Zeitschrift fuer Erziehungswissenschaft*, Vol. 37, No. 37, pp. 365-80.
- Chapman, David W., and Carol A. Carrier, Eds. (1990). *Improving Educational Quality: A Global Perspective*. New York: Greenwood Press.
- Cheng, Yin Cheong (1999). "The Pursuit of School Effectiveness and Educational Quality in Hong Kong." *School Effectiveness and School Improvement*, Vol. 10, No. 1, pp. 10-30.
- Chesterfield, Ray (1992). *Basic Education: Review of Experience*. USAID report.
- Chosdhury, A. M. R., Linda Ziegahn, Najmul Haue, Gajendra L. Shetha and Zahin Ahmed (1994). "Assessing Basic Competencies: A Practical Methodology." *International Review of Education*, Vol. 40, No. 6, pp. 437-454.
- Claffey, Joan M. (1990). "The Donor Role in Instructional Improvement" in David W. Chapman and Carol A. Carrier (Eds.) *Improving Educational Quality: A Global Perspective*. New York: Greenwood Press. pp.87-108.
- Clark, David L., Linda S. Lotto, and Martha M. McCarthy (1980). "Factors Associated with Success in Urban Elementary Schools" *Phi Delta Kappan*, Vol. 61, Mar. 1980, pp. 467-470.
- Clark, David L., Linda S. Lotto, and Terry A. Astuto (1984). "Effective Schools and School Improvement: A Comparative Analysis of Two Lines of Inquiry." *Educational Administration Quarterly*, Vol. 20, No. 3, pp. 41-68.
- Cogan, John J. (1982). "Education and Development in the Third World." *Educational Leadership*, Vol. 39, No. 6, pp. 430-432.
- Cohen, Michael (1983). "Instructional, Management, and Social Conditions in Effective Schools" in American Education Finance Association *School Finance and School Improvement, Fourth Annual Yearbook*. pp. 17-50.
- Cohn, Elchanan and Richard A. Rossmiller (1987). "Research on Effective Schools: Implications for Less Developed Countries". *Comparative Education Review*, Vol. 31, No. 3, pp. 377-399.
- Colclough, Christopher and Keith Lewin (1993). *Educating All the Children: Strategies for Primary Schooling in the South*. Oxford: Clarendon Press.
- Coleman, James S. (1966). *Equity of Educational Opportunity*. Washington, D.C.: U.S. Government Printing Office.
- Comer, James P. (1988). "Educating Poor Minority Children." *Scientific American*, Vol. 259, No. 5, pp. 42-48.
- Cuban, Larry (1983). "Effective Schools: A Friendly but Cautionary Note" *Phi Delta Kappan*, Vol. 64, Jun. 1983, pp. 695-696.

- D'Amico, Joseph (1982). "Each Effective School May Be One of a Kind" *Educational Leadership*, Vol. 40, No. 3, pp. 61-62.
- Dantley, Michael E. (1990). "The Ineffectiveness of Effective Schools Leadership: An Analysis of the Effective Schools Movement from a Critical Perspective" *Journal of Negro Education*, Vol. 59, No. 4, pp. 585-598.
- Darwin, Charles (1933). *Diary of the Voyage of H.M.S. Beagle*. Cambridge: The University Press.
- Davidson, Basil (1989). *The Fortunate Isles: A Study in African Transformation*. Trenton, N.J.: Africa World Press.
- Davis, John (1989). "Effective Schools, Organizational Culture, and Local Policy Initiatives" in Mark Holmes (Ed.) *Educational Policy for Effective Schools*. Toronto: The Ontario Institute for Studies in Education, pp. 112-127.
- Deal, Terrence E. and Lynn D. Celotti (1980). "How Much Influence Do (and Can) Educational Administrators Have on Classrooms?" *Phi Delta Kappan*, Vol. 61, Mar. 1980, pp. 471-473.
- EFA Forum Secretariat (1998). *Wasted Opportunities: When Schools Fail*. UNESCO: Paris.
- Economist Intelligence Unit (1999). *Country Profile: São Tomé, and Príncipe, Guinea-Bissau, and Cape Verde 1999-2000*. London: EIU.
- Edmonds, Ronald (1979). "Effective Schools for the Urban Poor." *Educational Leadership*, Vol. 37, No. 1, pp. 15-27.
- Edmonds, Ronald R. (1981). "Improving the Effectiveness of New York City Public Schools." In *The Minority Student in Public Schools: Fostering Academic Excellence*. Princeton, NJ: Educational Testing Service.
- Edmonds, Ronald R., and John R. Frederiksen (1979). "Search for Effective Schools: the Identification and Analysis of City Schools that are Instructionally Effective for Poor Children." RIE, Sep. 1979.
- Eisemon Thomas Owen, et al (1990). *Empirical Results and Conventional Wisdom: Primary School Effectiveness in Burundi*. Report to USAID.
- Ellis, Thomas I. (1988). "School Climate." *Research Roundup*, Vol. 4 No. 2 Feb 1988.
- Encarta (1999). *Encarta World English Dictionary: Online North American Edition*.
- Erickson, Edsel L. and Lois A. Carl (1982). *Creating Effective Schools*. Holmes Beach, FL: Learning Publications, Inc.
- Farrell, Joseph P. (1993). "International Lessons for School Effectiveness: The View From the Developing World" in Farrell, Joseph P. and João B. Oliveira (Eds.) *Teachers in Developing Countries*. Washington, D. C.: World Bank, pp. 25-37.

- Farrell, Joseph P. and João B. Oliveira, Eds. (1993). *Teachers in Developing Countries: Improving Effectiveness and Managing Costs*. Washington: The World Bank.
- Feiman-Nemser and Floden (1986). "The Cultures of Teaching" in Wittrock, Merlin C. (ed.) *Handbook of Research on Teaching, 3rd Ed.* New York: MacMillan Publishing Company. pp. 505-526.
- Fertig, Michael (2000). "Old Wine In New Bottles? Research Effective Schools in Developing Countries." *School Effectiveness and School Improvement*, Vol. 11, No. 3, pp. 385-403.
- Fields, Gary S. (1982). "Educational Progress and Economic Development" in Anderson and Windham (Eds.) *Education and Development*. Lexington, MA: Lexington Books, pp. 47-72.
- Filstead, W. J., Ed. (1970). *Qualitative Methodology: First Hand Involvement with the Social World*. Chicago: Markham.
- Fuller, Bruce (1986). "Is Primary School Quality Eroding in the Third World?" *Review of Educational Research*, Vol. 30, No. 4, pp. 491-507.
- Fuller, Bruce (1987). "What School Factors Raise Achievement in the Third World." *Review of Educational Research*, Vol. 57, No. 3, pp. 255-292.
- Fuller, Bruce (1990). "What Investments Raise Achievement in the Third World?" in David W. Chapman and Carol A. Carrier (Eds.) *Improving Educational Quality: A Global Perspective*. New York: Greenwood Press. pp. 17-44.
- Fuller, Bruce and Prema Clarke (1994). "Raising School Effects While Ignoring Culture? Local Conditions and the Influence of Classroom Tools, Rules, and Pedagogy." *Review of Educational Research*, Vol. 64, No. 1, pp. 119-157.
- Fuller, Bruce and Stephen P. Heyneman (1989). "Third World School Quality: Current Collapse, Future Potential." *Educational Researcher*, Vol. 18, No. 2, pp. 12-19.
- Fuller, Bruce, Haiyan Hua, and Conrad W. Snyder, Jr. (1994). "When Girls Learn More than Boys: The Influence of Time in School and Pedagogy in Botswana." *Comparative Education Review*, Vol. 38, No. 3, pp. 347-376.
- Fuller, Bruce and Anjimile Kapakasa (1991). "What Factors Shape Teacher Quality? Evidence From Malawi", *International Journal of Educational Development*, Vol. 11, No. 2, pp. 119-127.
- Fuller, Bruce and Conrad W. Snyder, Jr. (1991). "Vocal Teachers, Silent Pupils? Life in Botswana Classrooms." *Comparative Education Review*, Vol. 35, No. 2, pp. 274-294.
- Gannicott, Ken and David Throsby (1994). "Educational Quality and Effective Schooling", paper presented to the International Commission on Education for the Twenty-First Century, Vancouver, Canada April 1994.

- Gaziel, Haim (1996). "School Effectiveness and Effectiveness Indicators: Parents', Students', Teachers', and Principals' Perspectives." *International Review of Education*, Vol. 42, No. 5, pp. 475-494.
- Glenn, Beverly Caffee, and Taylor McLean (1981). *What Works: An Examination of Effective Schools for Poor Black Children*. Cambridge: Center for Law and Education.
- Gonçalves, José S. (1986). *End-of-Project Evaluation of the Primary and Non-Formal Education Project in Cape Verde*. Unpublished USAID report.
- Graham-Brown, Sarah (1991). *Education in the Developing World: Conflict and Crisis*. London: Longman.
- Gray, John (1993). Review of *Effective Schooling: Research, Theory and Practice*, by Jaap Scheerens in *School Effectiveness and School Improvement*, Vol. 4, No. 3, pp. 230-235.
- Grepne, Jonathan (1999). "Cape Verde: Economy" in *Africa South of the Sahara 2000*. Surrey: Europa Publications, pp. 285-289.
- Groliers (1995). CD-ROM Atlas.
- Gunawardena, G.B. (1986). *Review of Research on Determinants of Effective Schools in Sri Lanka*. Report to USAID.
- Hallinger, Phillip and Joseph Murphy (1986). "The Social Context of Effective Schools." *American Journal of Education*, Vol. 94, No. 3, pp. 328-355.
- Hanushek, Eric A. (1986). "The Economics of Schooling: Production and Efficiency in Public Schools." *Journal of Economic Literature*, No. 24, pp. 1141-1177.
- Harber, Clive and Nithi Muthukrishna (2000). "School Effectiveness and School Improvement in Context: The Case of South Africa." *School Effectiveness and School Improvement*, Vol. 11, No. 4, pp. 421-434.
- Harris, Abigail M., et al (1997). "What Happens to the Textbooks?" Paper presented at the 41st Annual Meeting of the Comparative and International Education Society.
- Hartwell, Ash and Emily Vargas-Baron (1998). "Learning for All: Policy Dialogue for Achieving Educational Quality." Paper presented at The International Working Group on Education. Munich, June 1998.
- Heneveld, Ward and Helen Craig (1996). *Schools Count: World Bank Project Designs and the Quality of Primary Education in Sub-Saharan Africa*. (African Technical Development Series. Technical Paper Number 303). Washington, D. C.: World Bank.
- Heyneman, Stephen P. (1982). "Resource Availability, Equality, and Educational Opportunity among Nations" in Anderson and Windham (Eds.) *Education and Development*. Lexington, MA: Lexington Books, pp. 129-144.

- Heyneman, Stephen P., and Dean T. Jamison (1980). "Student Learning in Uganda: Textbook Availability and Other Factors", *Comparative Education Review*, June 1980, pp. 206-220.
- Hofstede, Geert (1991). *Cultures and Organizations: Software of the Mind*.
- Holmes, Mark (1987a). *Educational Policy for Effective Schools*. Toronto: The Ontario Institute for Studies in Education.
- Holmes, Mark (1987b). "School Effectiveness: From Research to Implementation to Improvement" in Mark Holmes (Ed.) *Educational Policy for Effective Schools*. Toronto: The Ontario Institute for Studies in Education, pp. 3-30.
- Hoover, Mary Rhodes (1978). "Characteristics of Black Schools at Grade Level: A Description." *The Reading Teacher*, April 1978, pp. 757-762.
- Hua, Haiyan (1992). "Female Teachers and Teaching in Botswana Classrooms." Draft Report to Creative Associated International, Inc. USAID ABEL Project.
- Huber, Stephan G. (1999). "School Effectiveness: Was macht Schule wirksam?" *Schulmanagement*, Vol. 30, No. 2, pp. 10-17.
- Hurst, Paul (1981). "Some Issues in Improving the Quality of Education." *Comparative Education*, Vol. 17, No. 2, pp. 185-193.
- Hurst, Paul (1987). "The Methodology of Qualitative Research." *International Journal of Educational Development*, Vol. 7, No. 1, pp. 69-72.
- Husén, Torsten, Lawrence Saha, and Richard Noonan (1978). *Teacher Training and Student Achievement in Less Developed Countries*. Staff Working Paper, Washington D.C.: World Bank.
- Joyce, Bruce, Richard Hersh and Michael McKibbin (1983). *The Structure of School Improvement*. New York: Longman.
- Jones, Mildred (1997). "Trained and Untrained Secondary School Teachers in Barbados: Is There a Difference in Classroom Performance?" *Educational Research*, Vol. 39, No. 2, pp. 175-184.
- Kerley, Janet and Nadine Dutcher (1996). *The Improving Educational Quality Project: A Final Evaluation*. Bethesda, Maryland: USAID Center for Human Capacity Development.
- King, Kenneth (1981). "Dilemmas of Research Aid to Education in Developing Countries." *Comparative Education*, vol. 17, No. 2, pp. 247-254.
- King, Kenneth (1985). "North-South Collaborative Research in Education." *International Journal of Educational Development*, vol. 5, No. 3, pp. 183-191.

- King, Kenneth (1990). "The New Politics of International Collaboration in Educational Development: Northern and Southern Research in Education." *International Journal of Educational Development*, Vol. 10, No. 1, pp. 47-57.
- Klitgaard, Robert E. and George Hall (1973). *Are There Unusually Effective Schools?* Santa Monica: Rand Corporation Publications Department.
- Krathwohl, David R. (1998). *Methods of Educational and Social Science Research, Second Edition*. New York: Longman.
- Kremer, Michael, et al (1997). "Textbooks, Class Size and Test Scores: Evidence from a Prospective Evaluation in Kenya." Institute for Policy Reform Working Paper.
- Leithwood, Kenneth A. (1989). "School System Policies for Effective School Administration" in Mark Holmes (Ed.) *Educational Policy for Effective Schools*. Toronto: The Ontario Institute for Studies in Education, pp. 73-92.
- Levin, Henry M. (1987). "Accelerated Schools for Disadvantaged Students." *Educational Leadership*, Vol. 44, No. 6, pp. 19-21.
- Levine, Daniel U. (1990). "Update on Effective Schools: Findings and Implications from Research and Practice" *Journal of Negro Education*, Vol. 59, No. 4, pp. 577-584.
- Levine, Daniel U, Rayna F. Levine and Eugene E. Eubanks (1984). "Characteristics of Effective Inner-City Intermediate Schools." *Phi Delta Kappan*, Vol. 65, June 1984, pp. 707-711.
- Levine, Daniel U., and Joyce Stark (1982). "Instructional and Organizational Arrangements That Improve Achievement in Inner-City Schools." *Educational Leadership*, Dec. 1982, pp. 41-46.
- Lewis (1985).
- Lezotte, Lawrence W., and Beverly A. Bancroft (1985). "Growing Use of the Effective Schools Model for School Improvement." *Educational Leadership*, Vol. 42, No. 6, pp. 23-27.
- Lezotte, L. and B. Bancroft (1985). "School Improvement Based on Effective Schools Research: A Promising Approach for Economically Disadvantaged and Minority Students." *The Journal of Negro Education*, Vol. 54, No. 3, pp. 301-312.
- Lezotte, Lawrence W., and Joseph Passalacqua (1978). "Individual School Buildings do Account for Differences In Measured Pupil Performance." Michigan State University.
- Lobban, Richard (1995). *Cape Verde: Crioulo Colony to Independent Nation*. Boulder: Westview Press.
- Lockheed, Marlaine E., and Adriaan M. Verspoor (1991). *Improving Primary Education in Developing Countries*. Oxford: Oxford University Press.

- Ludtke, Jean (1989). *Atlantic Peeks: An Ethnographic Guide to the Portuguese-Speaking Atlantic Islands*. Hanover, MA: The Christopher Publishing House.
- Marshall, Catherine and Gretchen B. Rossman (1999). *Designing Qualitative Research, 3rd Edition*. Thousand Oaks: Sage Publications.
- Maxwell, Joseph (1996). *Qualitative Research Design: An Interactive Approach*. Thousand Oaks: Sage Publications.
- McCormack-Larkin, Maureen (1985). "Ingredients of a Successful School Effectiveness Project," *Educational Leadership*, Vol. 42, No. 6, pp. 31-37.
- McGinn, Noel, Donald P. Warwick, and Fernando Reimers (1989). "Do differences Between Schools and Between School Administrators in Pakistan Contribute to Differences in Student Achievement?" Papers on Primary Education in Pakistan, Report #3. USAID.
- McGinn, Noel (1998). "What is Required for Successful Education Reform? Learning for Errors." Paper presented at *Education Reform in the South Seminar*, UNESCO, Paris.
- McGinnis, Linda and Samuel C. Carlson (1997). "African Classrooms: Leapfrogging into the Information Age." Paper presented at the 1997 ADEA Biennial Meeting.
- Meintel, Deirdre (1984). *Race, Culture and Portuguese Colonialism in Cabo Verde*. New York: Syracuse University.
- Merriam, S. (1988). *Case Study Research in Education: A Qualitative Approach*. San Francisco: Jossey-Bass.
- Miller, Stephen K., Shelley R. Cohen, and Kathleen A. Sayre (1985). "Significant Achievement Gains Using the Effective Schools Model." *Educational Leadership*, Vol. 42, No. 6, pp. 38-43.
- Miske, Shirley J., and Amy Jo Dowd (1998). *Teaching and Learning in Mangochi Classrooms: combining Quantitative and Qualitative Information to Study Twelve Primary Schools in Malawi*. Creative Associates International, Washington, D.C.
- Moock, J. L. (1973). *Pragmatism and the Primary School: The Case of a Non-Rural Village*. Center for Research on Economic Development, Ann Arbor, Michigan.
- Moulton, Jeanne (1994). "How Do Teachers Use Textbooks and Other Print Materials?: A Review of the Literature". Report to USAID, Improving Educational Quality Project.
- Moulton, Jeanne (1997). "How Do Teachers Use Textbooks?: A Review of the Research Literature." USAID Technical Paper No. 74.
- Murnane, Richard J. (1981a). "Inner-City Schools Can Make a Difference." In *The Minority Student in Public Schools: Fostering Academic Excellence*. Princeton, NJ: educational Testing Service.
- Murnane, Richard J. (1981b). "Interpreting the Evidence on School Effectiveness." *Teachers College Record*, Vol. 96, No 1, pp. 19-35.

- Murphy, Joseph and Phillip Hallinger (1988). "Characteristics of Instructionally Effective School Districts." *Journal of Educational Research*. Vol. 81, No. 3, pp. 175-181.
- Murphy, Joseph, Philip Hallinger, and Richard P. Mesa (1985). "School Effectiveness: Checking Progress and Assumptions and Developing a Role for State and Federal Government." *Teachers College Record*, Vol. 86, No. 4, pp. 615-641.
- Nagel, Joane and Conrad W. Snyder, Jr. (1989). "International Funding of Educational Development: External Agendas and Internal Adaptations -- the Case of Liberia." *Comparative Education Review*, vol. 33, no. 1, pp. 3-20.
- New York State Office of Education Performance (1974). *School Factors Influencing Reading Achievement: A Case Study of Two Inner City Schools*. Albany: New York State Office of Education Performance.
- Njoroge, R.J. and G.A. Benaars (1986). *Philosophy and Education in Africa*. Transafrica.
- Nkinyangi, J.A. (1980). "Material, Pedagogical, and Socio-Psychological Differences in Kenya's Primary Schools and Their Impact on Educational Outcome". Unpublished monograph, University of Nairobi.
- Northwest Regional Educational Lab. (1984). *Effective Schooling Practices: A Research Synthesis*. Northwest Regional Educational Lab., Portland, OR.
- Núñez, Benjamin (1995a). *Dictionary of Portuguese African Civilization, Vol. 1: From Discovery to Independence*. London: Hans Zell Publishers.
- Núñez, Benjamin (1995b). *Dictionary of Portuguese African Civilization, Vol. 2: From Ancient Kings to Presidents*. London: Hans Zell Publishers.
- Office of Educational and Cultural Research and Development (1986). *Determinants of Effective Schools in Indonesia*. Jakarta, Indonesia: Ministry of Education and Culture.
- Office of the National Education Commission (1988). *Determinants of Effective Schools: Thailand Country Research Review*. Bangkok: National Education Commission.
- Okyere, Beatrice A. (1996). "What did CRIOPPEG Classroom research Reveal About Factors affecting Language Learning?" USAID report.
- Omokhodion, J. Otibhor (1989). "Classroom Observed: The Hidden Curriculum in Lagos, Nigeria." *International Journal of Educational Development*, Vol. 9, No. 2, pp. 99-110.
- Oxenham, John (1985). "Transpositions from Research into Policy and Practice: Possibilities for Foreign Researchers." *International Journal of Educational Development*, Vol. 5, No. 3, pp. 193-202.
- Patton, Michael (1990). *Qualitative Evaluation and Research Methods, Second Edition*. Newbury Park, CA: Sage Publications.

- Phi Delta Kappa (1980). *Why do Some Urban Schools Succeed? The Phi Delta Kappa Study of Exceptional Urban Elementary Schools*. Bloomington, IN: Phi Delta Kappa.
- Pogrell, Lorenz von (1985). "Recent Educational Research on Developing Countries by German Researchers : A Survey of the Literature." *International Journal of Educational Development*, Vol. 5, No. 3, pp. 141-145.
- Postlethwaite, Neville (1998). "The Conditions Of Primary Schools In Least-Developed Countries." *International Review of Education*, Vol. 5, No. 4, pp. 289-317.
- Psacharopoulos, George (1988). "Critical Issues in Education: A World Agenda." *International Journal of Educational Development*, Vol. 8, No. 1, pp. 1-7.
- Purkey, Stewart C. and Marshall S. Smith (1982). "Too Soon to Cheer? Synthesis of Research on Effective Schools." *Educational Leadership*, Vol. 40, No. 3, pp. 64-69.
- Purkey, Stewart C. and Marshall S. Smith (1983). "Effective Schools: A Review." *The Elementary School Journal*. Vol. 83, No. 4, pp. 427-452.
- Ralph, John H. and James Fennessey (1983). "Science of Reform: Some Questions about the Effective Schools Model" *Phi Delta Kappan*, Vol. 64, Jun. 1983, pp. 689-694.
- Republic of Cape Verde, Ministry of Finances and Planning (1991). *Third National Development Plan: Volume II, Sectoral Reports*.
- Republic of Cape Verde, Ministry of Education, Science and Culture (1998). *Cycle of Debate Over Integrated Basic Education*.
- Reynolds, David, Pam Sammons, Louise Stoll, Michael Barber and Josh Hillman (1996). "School Effectiveness and School Improvement in the United Kingdom." *School Effectiveness and School Improvement*, Vol. 7, No. 2, pp. 133-158.
- Riddell, Abby Rubin (1997). "Assessing Designs for School Effectiveness Research and School improvement in Developing Countries". *Comparative Education Review*, Vol. 41, No. 2, pp. 178-204.
- Roddell, Abby Rubin (1999). "The Need For A Multidisciplinary Framework For Analysing Educational Reform In Developing Countries." *International Journal of Educational Development*, Vol. 19, pp. 207-217.
- Robalo, Fernando L., (1999). "A Dinamica Social das Comunidades Piscatórias" in F. Shodjai, (Ed.), *Simpósio: 'Realismo no Desenvolvimento da Pesca Artesanal'*.
- Rondinelli, Dennis A, John Middleton, and Adriaan M. Verspoor (1990). *Planning Education Reforms in Developing Countries: The Contingency Approach*. Durham: Duke University Press.
- Rosenholtz, Susan J. (1985). "Effective Schools: Interpreting the Evidence." *American Journal of Education*, Vol. 93, No. 3, pp. 352-388.

- Rugh, Andrea B. (1990). "Improving Teacher Effectiveness in the Classroom". Bridges Casual Papers Series, USAID.
- Rugh, Andrea (1992). *Teaching Practices to Increase Student Achievement: Evidence from Pakistan*. Washington: USAID.
- Rust, Val D., and Per Dalin (1990). *Teachers and Teaching in the Developing World*. New York: Garland Publishing, Inc.
- Rutter, Michael (1983). "School Effects on Pupil Progress: Research Findings and Policy Implications." *Child Development*, Vol. 54, pp. 1-29.
- Samoff, Joel (1994a). "Surveying Sector Studies: A Work Program for the Preparation of an Inventory and Analytic Overview of Africa Education Sector Studies." A paper prepared for the Steering Committee of the Development of African Education Working Group on Education Sector Analysis.
- Samoff, Joel (1994b). "Analyses, Agendas, and Priorities in African Education: A Review of Externally Initiated, Commissioned, and Supported Studies of Education in Africa, 1990-1994" (Preliminary Draft). A paper prepared for discussion at the Working Group Lead Agency, UNESCO, meeting, January 1995.
- Samoff, Joel (1999). "Education Sector Analysis in Africa: Limited National Control and Even Less National Ownership." *International Journal of Educational Development*, Vol. 19, pp. 249-272.
- Saunders, Lesley (2000). *Effective Schooling in Africa Report 2: Key Issues Concerning School Effectiveness and Improvement*. World Bank. Washington, D.C.
- Scheerens, Jaap and Bert P. M. Creemers (1996). "School Effectiveness in the Netherlands: The Modest Influence of a Research Programme." *School Effectiveness and School Improvement*, Vol. 7, No. 2, pp. 181-195.
- Scheerens, Jaap (2001). "Monitoring School Effectiveness in Developing Countries." *School Effectiveness and School Improvement*, Vol. 12, No. 4, pp. 359-384.
- Schwille, John et al (1990). "Facing Up to the Dilemmas of Quality : The Lessons of BRIDGES Research in Burundi." Paper prepared for the annual meeting of the BRIDGES Project.
- Shah, Mobeen Ahmed (1991). *A Study of Schools with Enrolment less than 40 Students*. Primary Education Development Programme, Balochistan, Quetta, Pakistan.
- Shann, Mary and Raimundo Helio (1988). *School Effectiveness Research: A View from Brazil*. Paper presented at the American Educational Research Association Annual Meeting, April 1988.
- Shann, Mary (1999). "Academics and Culture of Caring: The Relationship Between School Achievement and Prosocial and Antisocial Behaviors in Four Urban Middle Schools." *School Effectiveness and School Improvement*, Vol. 10, No. 4, pp. 390-413.

- Shodjai, F., Ed. (1999). *Simpósio: 'Realismo no Desenvolvimento da Pesca Artesanal'*. Mindelo: Gráfico do Mindelo.
- Simmons and Alexander (1980). "Factors which Promote School Achievement in Developing Countries: A Review of the Research" in John Simmons (ed.) *The Education Dilemma: Policy Issues for Developing Countries in the 1980s*. Oxford: Pergamon Press.
- Sizemore, Barbara (1983). *An Abashing Anomaly: the High Achieving Predominantly Black Elementary School*. National Institute of Education, Washington, D.C.
- Sizemore, Barbara (1985). "Pitfalls and Promises of Effective Schools Research." *Journal of Negro Education*, Vol. 54, No. 3, pp. 269-288.
- Slavin, Robert E. et al (1989). "Can Every Child Learn? An Evaluation of 'Success for All' in an Urban Elementary School." *Journal of Negro Education*, vol. 58, No. 3, pp. 357-367.
- Smith, John (1983). "Quantitative Versus Qualitative Research: An Attempt to Clarify the Issue." *Educational Researcher*, Mar. 1983, pp. 6-31.
- Smits, Paul (1985). "Research and Education in Developing Countries: An Inventory of Dutch Projects and Programmes." *International Journal of Educational Development*, Vol. 5, No. 3, pp. 147-154.
- Sprey, Marianne, Barbara Dlamini and Jan van Hee (1997). "Teaching Academic Subjects in Swazi Preschools." *International Journal of Educational Development*. Vol. 17, No. 3, pp. 285-293.
- Squires, David A., William G. Huitt, and John K. Segars (1981). "Improving classrooms and Schools: What's Important." *Educational Leadership*, Vol. 39, No. 3, pp. 174-179.
- Stephens, David (1990). "Qualitative Factors in Education, Research and Development: A Position Paper." *International Journal of Educational Development*, Vol. 10, No. 2/3, pp. 143-149.
- Stringfield, Sam and Charles Teddlie (1988). "A Time to Summarize: The Louisiana School Effectiveness Study." *Educational Leadership*, Oct. 1988, pp. 43-49.
- Stringfield, Sam and Rebecca Herman (1996). "Assessment of the State of School Effectiveness Research in the United States of America." *School Effectiveness and School Improvement*, Vol. 7, No. 2, pp. 159-180.
- Swanson, Austin D. (1976). "A Study of the Characteristics of School Outliers." Paper presented at the Annual Meeting of the American Educational Research Association.
- Sweeney, James (1982). "Highlights from Research on Effective School Leadership." *Educational Leadership*, Vol. 39 No. 5 Feb.1982, p349.

- Tan, Jee-Peng, Julia Lane, and Paul Coustère (1997). "Putting Inputs to Work in Elementary Schools: What Can Be Done in the Philippines?" *Economic Development and Cultural Change*, Volume 45, Number 4, July 1997 pp. 857-881.
- Tashakkori, Abbas and Charles Teddlie (1998). *Mixed Methodology: Combining Qualitative and Quantitative Approaches*. Thousand Oaks: Sage Publications.
- Teddlie, Charles and David Reynolds (2000). *The International Handbook of School Effectiveness Research*. New York: Falmer Press.
- Thulstrup, Erik (1998). "Science Education for Development: Is Quality Affordable?" Education Paper presented at UNESCO's Education Reform in the South Seminar, Paris.
- Toor, Abdus Salam, Saleem Akbar and Muhammad Nawaz (1992). "A Study of Multi Class Teaching at Primary Level in Balochistan." Sociological Research Group, University of Balochistan
- UNICEF (1999). *Situação Mundial da Infância 1999: Educação*. Paris: UNICEF.
- Urwick, James and Sanusi Usman Junaidu (1991). "The Effects of School Physical Facilities on the Processes of Education: A Qualitative Study of Nigerian Primary Schools." *International Journal of Educational Development*, Vol. 11, No. 1, pp. 19-29.
- USAID (1988). *Determinants of Effective Schools: Thailand Country Research Review*. Basic Research and Implementation in Developing Education Systems Education Development Discussion Paper.
- Vedder, Paul (1994). "Global Measurement of the Quality of Education: A Help to Developing Countries?" *International Review of Education*, Vol. 40, No. 1, pp. 5-17.
- Villanova, Robert M. (1982). "Measuring and Validating the Characteristics of Instructionally Effective Schools in Connecticut." Paper presented at the American education Research Association Annual Meeting, New York.
- Vulliamy, Graham (1987). "School Effectiveness Research in Papua New Guinea." *Comparative Education*, Vol. 23, No. 2, pp. 209-223.
- Vulliamy, Graham (1990). "How Can Qualitative Research Contribute to Educational Policy-Making in Developing Countries?" *International Journal of Educational Development*, Vol. 10, No. 2/3, pp. 151-156.
- Walberg, Herbert J. (1986). "What Works in a Nation Still at Risk." *Educational Leadership*, Vol. 44, No. 1, pp. 7-10.
- Warwick, Donald P., Fernando Reimers and Noel McGinn (1989). "Teacher Characteristics and student Achievement in Math and Science." Papers on Primary Education in Pakistan, USAID.

- Warwick, Donald P. and Fernando M. Reimers (1991). "Good Schools and Poor Schools in Pakistan", Harvard Institute for International Development, Development discussion Papers, paper number 399 ES. Harvard University.
- Watson, Keith (1985). "Current and Recent Educational Research with and in Developing Countries by U.K. Researchers." *International Journal of Educational Development*, Vol. 5, No. 3, pp. 155-165.
- Weber, George (1971). *Inner-City Children Can Be Taught to Read: Four Successful Schools*. Council for Basic Education, Washington, D.C.
- Wimpelberg, Robert K. and Charles Teddlie (1989). "Sensitivity to Context: The Past and Future of Effective Schools Research." *Educational Administration Quarterly*, Vol. 25, No. 1, pp. 82-107.
- The World Bank (1980). *Education Sector Policy Paper*. Washington D.C.: The World Bank.
- The World Bank (1994a). Report No. 12422-CV: "Staff Appraisal Report, Republic of Cape Verde, Public Sector Reform and Capacity Building Project." Jan. 7, 1994.
- The World Bank (1994b). Draft Report: "Staff Appraisal Report, Republic of Cape Verde, Basic Education and Training Project." April 25, 1994.
- The World Bank (1994c). "Improving Madagascar's Primary Education: A Focus on Schools" *Findings: Africa Region*, No. 29, Dec. 1994.
- The World Bank (1995). *Priorities and Strategies for Education: A World Bank Review*. Washington D.C.: World Bank.