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FOREWORD

Since 1990 there has been an interest percolating among researchers with respect to understanding and improving education quality in South African schools and classrooms. Several research projects and individual studies with such an interest were launched independently by varied organisations such as the Policy Support Unit of the Education Foundation, the Education Policy and System Change Unit (EDUPOL) of the Urban Foundation, the Foundation for Research and Development, education departments of universities, and several non-governmental organisations in different parts of the country. In 1994, the Improving Education Quality (IEQ) Project opened offices in Durban and decided to initiate a dialogue among these different research initiatives with their converging interest in changing education quality at the classroom level. The initial dialogue took the form of a national conference held in Cape Town on 30 March 1994 on the theme, "Effective Schools, Effective Classrooms." The documents in this collection cannot begin to capture the quality and intensity of the discussions and debates at this historic conference. The conference proposed that the dialogue be continued through ongoing communication among these different research initiatives. The IEQ Project is committed to sustaining this dialogue on education quality in different forms; one such form is the dissemination of the papers presented at this important conference.

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May 1994

BEYOND EFFECTIVE SCHOOLS:
A CRITICAL SYNTHESIS OF THE LITERATURE
AND
AN ALTERNATIVE PROPOSAL
WITH PARTICULAR REFERENCE TO DEVELOPING COUNTRIES

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SECTION A

1. INTRODUCTION

By the turn of the decade (1990), writing on "effective schools" had reached a saturation point in education publications. At least a dozen "reviews of the literature" had been published, several prominent journals had devoted "special" issues; to the topic, and the accumulated research (and researchers) feverishly crossed Western borders to "apply" these findings in the Third World.

Despite the proliferation of "effective schools" literature, there remains some serious weaknesses in the existing knowledge base. First, most reviews - even critical ones - have argued within what could be called the effective schools paradigm. That is, having accepted the motion effective schools exist and that their characteristics can be modelled or check listed, the task was then simply "to get better at" measuring such characteristics. Second, while critiques abound, very few systematic and coherent attempts have been made to propose alternatives either within or outside of the effective schools paradigm. And third, much of the application of the effective schools literature outside of the West has erroneously rested on fixed assumptions about schooling and resources transferred to the developing world.

This report is different from existing reviews in that it (i) applies a critical framework to the assessment of the effective schools literature (ii) examines the transnational impact of this

literature and its limitations in the developing world, and (iii) proposes an alternative which rests on different psychological, epistemological and political assumptions than generated by the effective schools literature.

2. BACKGROUND

Most commentators on effective schools trace the origins of the subject to the 1966 study by James Coleman and his colleagues, the so-called Equality of Educational Opportunity Report (Coleman et al., 1966). This and a set of related studies at the time (Jencks et al., 1972) showed that

...easily measurable differences among (class size variation from 20 to 30 pupils, existing differences in teacher presence training, teacher experience and salaries, number of books in the library etc) have little consistent relationship to student achievement (Purkey & Smith 1983, p. 428) and that schools had little effect on students' achievement when compared to the effects of family background and socio-economic status. At about the same time, the Rand Corporation charged with the brief to examine "what is known at present about the determinants of educational effectiveness" produced an even more pessimistic finding that "research has found nothing that consistently and unambiguously makes a difference in student outcomes" (Averch et al 1972, p.x).

These research findings from the late 1960s raised what was to become an enduring question in the education community:

Do Schools Matter?

What follows is a periodized characterization attempted by educational researchers and statisticians to address this fundamental question raised by Coleman and related studies during the 1960s and early 1970s.

3. TRENDS AND PATTERNS IN EFFECTIVE SCHOOLS RESEARCH

There have been broad consistencies in the conceptual questions and methodological procedures pursued in the effective schools research since the 1960s. The following categorizations must therefore be read simply as an attempt to identify specific trends since the Coleman Report without suggesting that the categories are exclusive to any one period. However, there appear to be research emphases characterizing each decade since the 1960s.

3.1 The 1960s and early 1970s: large sample, quantitative studies

The first studies related to school effectiveness relied on large sample regression and correlational analyses of school inputs and outcomes. The Coleman study, for example, is based on a national survey of teachers, students and principals in approximately 4,000 schools to examine school characteristics (e.g., physical facilities), staffing issues (e.g., teacher training) and student background (e.g. socio-economic status). As mentioned earlier, this research (Coleman et al 1966; Jencks et al 1972; Averch et al 1972) generated a broad, generalised finding that student background characteristics were far more powerful in determining student achievement than any school-level factors.

Several critiques of this research set formed the basis for what was to become known as the school effectiveness literature. First, it was pointed out that these studies (e.g. Coleman et al 1966) measured resources available to the school and not how these resources were organised and used; that is,

... how well teachers and specialists co-ordinate their work together, how well teachers and students make use of the time available to them for instructional activities, and on how well teachers motivate their students and reinforce their efforts (Cohen 1982, p. 14).

Second, these studies have been described as limiting in that they focus on average achievement level thereby overlooking the fact that within schools there is a wide range of classroom achievement levels and that within classrooms there is wide variation in individual student achievement levels (Cohen 1982, p.14).

3.2 The mid-to late 1970s: refined large sample quantitative studies

Following the pessimistic accounts of school effects, a responsive set of studies attempted to re-examine the evidence based on "methodological improvements that allowed [researchers] to be more sensitive to the relationship between school resources and the quality of education" (Clark et al 1984., p.45). Several commentators on this period are in agreement with Cohen (1982) that while

much of the early research was not sufficiently sensitive to important things that happened to individual student within the school (p.14),

these earlier studies did lead to a

sharpening [of] the strategies employed in subsequent studies to learn what about schools may make a difference (p.14).

Specific methodological strategies in this "second wave" of school effectiveness studies used individual students as the unit of analysis, measured progress rather than achievement as an estimate of effectiveness and developed a more complex estimate of school resources and their delivery within classrooms (Clark et al., 1984, p.45).

Richard Murnane (1981), in his review of this literature, concluded that "schools matter" and that while "there is no unequivocal consensus regarding the role of any school resource in contributing to school achievement," he argued that

a judicious interpretation of the evidence (including the research methodology as well as the pattern of coefficient estimates) does suggest some tentative conclusions... primary resources are teachers and students... Physical facilities, class size, curricular and instructional strategies can be seen as secondary resources that affect student learning through their influence on the behaviour of teachers and students (p.45).

Citing four studies (Armor et al., 1976; Hanushek 1971; Murnane 1975; and Murnane & Phillips 1979) using these improved quantitative methodologies, and in contrasting reference to the Coleman/Lenchs research, Murnane (1981) asks:

What have we learned from quantitative studies of school effectiveness? The most notable finding is that there are significant differences in the amount of learning taking place in different schools and in different classrooms within the same school... even after taking into account the skills and backgrounds that children bring to school (p.20, emphasis added).

3.3 The late 1970s to early 1980s; Checklists and Case Studies

3.3.1 Checklists

Starting with a landmark study by Ronald Edmonds (1979) on "Effective Schools for the Urban Poor," a body of literature emerged at the close of the 1970s in the form of a summation, a set of general conclusions which, in effect, describes characteristics of "effective schools" (D'Amico 1982, p.6; see Brookover & Lezotte 1979; Edmonds & Frederiksen 1979; Duckett et al., 1980; and Rutter et al., 1979).

Assuming that "schools matter," this literature set out to describe the properties of "unusually effective schools" often by comparing "outlier schools." The assumption was that by identifying the salient characteristics of effective schools, these could be transferred or replicated to other contexts in a relatively unproblematic manner.

The production of checklists, at a first glance, produced a range of "effective school characteristics" which were both different and contradictory. Consider the comparative list reproduced by D'Amico, 1982 (Table on next page).

TABLE A

Illustration 1

Term	Improving Schools	Effective Schools	Exceptional Schools
	Brookover & Lezotte (1979)	Edmonds & Frederiksen (1979)	Phi Delta Kappa (1980)
Definition	Schools which between 1974 and 1976 showed an increase of 5% or more of fourth grade students who could master at least 75% of the objectives tested by a math and reading test while simultaneously showing a 5% decrease in the ones who could only master less than 25% of the same objectives.	Schools where more than half of the sixth grade students scored at or above the 75th percentile on a verbal aptitude test.	Schools that showed a positive change in any one or a combination of: student achievement; student attitudes toward school or themselves as learners; teacher attitudes toward school or student as learners; community/parent attitudes toward school.

Illustration 2

Term	Brookover & Lezotte (1979)	Edmonds* (1981)	Phi Delta Kappa (1980)
Characteristics	<ul style="list-style-type: none"> . Improving schools accept and emphasize the importance of basic skills mastery as prime . Staff of improving schools believe <u>all</u> students can master the basic skills objectives and they believe the principal shares this belief; . Staff of improving schools expect their students will go on with their education; . Staff of improving schools do not make excuse: they assume responsibility for teaching basic skills and are committed to do so; . Staff of improving schools spend more time on achieving basic skills objectives; . Principals at improving schools are assertive instructional leaders and disciplinarians, and they assume responsibility for the evaluation of the achievement of basic skills objectives; 	<ul style="list-style-type: none"> . Clarity that pupil acquisition of the basic school skills takes precedence over all other schools activities; . A climate of expectation in which no children are permitted to fall below minimum but efficacious levels of achievement; . Strong administrative leadership without which the disparate elements of good schooling can be neither brought together nor kept together; . Presence of a means by which pupil progress can be frequently monitored; . An atmosphere that is orderly without being rigid, quiet without being oppressive, and generally conducive to the instructional business at hand. 	<ul style="list-style-type: none"> . Successful schools are characterized by clearly stated curricular goals and objectives; . The leaders attitudes toward urban education and expectations for school or program success determine the impact of the leader on exceptional school; . The behavior of the designated school or program leader is crucial in determining school success; . Successful urban schools frequently employ techniques of individualized instruction; . Structured learning environments are particularly successful in urban classrooms; . Reduction in adult/child ratios are associated with positive school performance; . Successful schools are often supported with special project funds from federal, state, and local sources; . Successful urban schools are characterized by high levels of parental contact with the school and parental involvement with school activities

The Edmonds (1979) research, often cited as a basic reference for "checklist studies," lists FIVE factors attributable to effective schools:

1. strong administrative leadership;
2. school climate conducive to learning; ..
3. high expectations for children's achievement;
4. clear instructional objectives for monitoring student performance; and
5. emphasis on basic skills instruction

But Austin (1981) produced 29 characteristics Brookover & Lezotte (1979) identify 10 characteristics, Weber (1971) recommended 8 factors while others studies (such as the 1980 Phi Delta Kappa study) generate different properties in locating effective schools. Similar observations have led Purkey Smith (1983) to conclude that

...reviews do not always find the same features to be characteristic of effective schools, even when considering basically the same literature (p.429),

and continue that :

...while all the reviews assume that effective schools can be differentiated from ineffectiveness, there is no consensus yet on just what the salient characteristics happen to be (p.430).

In sum, while this literature takes for granted the fact that "schools matter" they proceed to identify those characteristics which explain "what works " in effective schools.

3.3.2 Case Studies

Case studies have always featured a methodology for conducting effective schools research after the large-scale quantitative studies of the 1960s. These case studies generally fall into two classes (identified by Ralph & Fennessey 1983, p. 690-691).

(a) **comparative case studies** - such as Weber's (1971) study comparing four exemplary schools and subsequent studies such as that by Ellis (1975) which compared 10 exemplary with an equal number of ineffective schools serving similar groups i.e, students in poorer neighbourhoods.

(b) **simple case studies** - such as the well-known Phi Delta Kappa (1980) study addressing the question WHY DO SOME URBAN SCHOOLS SUCCEED? Individual successful schools, identified by public reputation, were isolated for in-depth study to examine "what works" and to offer explanations for success.

Some of these case studies formed the basis for the production of checklists (Brookover & Lezotte 1979) but others simply generated non-prescriptive detailed ethnographic "portraits" of "good schools" (Lightfoot 1983).

Case study methodologies have also generated sustained critique, the most comprehensive by Purkey & Smith (1983) and is worth citing at length:

...while each case study has its particular strengths and weakness, as a group they generally share the five weaknesses: small and unrepresentative samples, possible errors in identifying effective schools because of uncontrolled student body characteristics such as social class, achievement data aggregated at the school level, inappropriate comparisons and the use of subjective criteria in determining school success (p.433).

Similarly, Ralph & Fennessey (1983) identify "Three problems that crop up persistently in these (simple case) studies:"

observer bias, the paucity of verifiable evidence for empirical claims, and the lack of control variables. Observer bias applies both to the reliability of classroom observations and to the identification of exemplary schools (p.691).

The significance of these case study methodologies of the 1980s is that they injected strong qualitative components into the school effectiveness literature which provided the in-depth ethnographic details of classroom life often lost in large scale statistical investigations.

3.4 The Late 1980s and Early 1990s: Refined Methodologies, Renewed Critiques, Refocussed Agendas

By the early 1990s it was clear that the effective schools research had entered a cycle of "research--critiques of limitations--improved research" without any critical new departures in this body of literature. Each successive research endeavour is an attempt to "rectify" methodological limits in previous research or to "test" hypotheses of existing research. In the main, this research employs increasingly sophisticated statistical procedures on large sample studies - reminiscent of

the Coleman studies era (Witte & Walsh 1990; Odden 1990; Aikin & Longford 1986; Goldstein 1987). The assumption seems to be that by increasing the methodological sophistication of the quantitative research, it would be possible to "get it right."

At the same time, the more recent research was yielding increasingly pessimistic findings on the overly positive - some would say evangelical - research of the previous generation (1970s-1980s) of school effectiveness literature. Zirkel & Greenwood (1987) simply echoed this pessimistic note from other assessments by concluding that:

In the light of the marked limitations of the early research and the mixed effects of the more recent research, broad characterizations ... are premature overstatements (p.266).

Similarly, Odden's (1990) work on class size and achievement judged that:

System-wide class reduction would have little effect on student performance and even if it did, would cost too much money (p.224).

It is fair to conclude that effective schools research has reached a definite cul-de-sac in the 1990s placing the research agenda exactly where it was left by Coleman and others in the late 1960s i.e., that schools have limited effects on student performance.

Why has the effective schools industry fallen on such hard times? Why are so many schools still "ineffective" or "mediocre"

rather than "unusually effective"? There are many reasons for this cul-de-sac in effective schools research one of which was identified by Purkey & Smiths (1983):

It is one thing to demand that all schools be effective; it is an entirely different matter to assume ... that what has positive effects in one setting will invariably have the same effects in another (p.439).

Furthermore, the compelling logic of effective schools has propelled this literature into policy-making and decision-making ahead of a careful sanitising of the findings. As Ralph & Fennessey (1983) correctly charge:

The significance of the effective schools research lies more in the ideology underlying it than in the validity of the empirical support for the idea that schools can lessen the effects of race and social class on academic achievement (p.693).

But this represents only a small part of the explanation for the failure of effective schools research. The thesis of this report is that the theoretical and methodological perspective of this research is fundamentally flawed, beyond the litany of critiques summarized in the next section.

4. COMMON CRITICISMS OF THE EFFECTIVE SCHOOLS RESEARCH

Criticisms of the effective schools literature abound, ranging from detailed methodological critiques (Purkey & Smith 1983) to assessments of the ideology underpinning "the effective schools model" (Ralph & Fennessey 1983). Most critiques, however, have been supportive, offering only "cautionary notes" to an otherwise positive assessment (Cuban 1983; Rowan et al., 1983).

Summarized, the main lines of criticism are the following:

- 4.1 sample bias - many studies are based on a small number of schools, often urban and elementary;
- 4.2 definitional concerns - various authors employ varied and complicating definitions of "effectiveness" making comparison of findings difficult ; some concepts, such as "school climate," are simply too difficult to operationalize with attendant problems of measurement and comparison;
- 4.3 outcome measures - most studies have focused narrowly on "basic skills achievement" on standardized tests as the sole indicator of effectiveness, ignoring the range of other school effects and the more complex processes of schooling not examined in "input-output" studies of school effectiveness. In addition, researchers often use "subjective criteria" for determining school success.
- 4.4 control for background characteristics - many studies focus only on school-level variables and ignore the intercorrelation between student background characteristics and school outcomes.
- 4.5 inappropriate comparisons - many studies compare "outlier schools," that is, unusually effective and ineffective

schools at opposite ends of the spectrum. Yet most schools are "average" and therefore constitute a more appropriate point of comparison.

4.6 methodological limitations - many studies, particularly qualitative investigations, are described as "anecdotal descriptions" or having a "journalistic style of analysis" In the words of Purkey & Smith (1983),

the new school effectiveness literature... is weak in many respects, most notably in its tendency to present narrow, often simplistic, recipes for school improvement derived from non-experimental data (p.427).

4.7 aggregation of achievement data - many studies use an "average" score for school-level data, thereby mashing the wide variation within schools (or even within classrooms) for different groups or subgroups of students

4.8 levels of analysis - many studies have not recognized the multi-level nature of schooling (individual student, teacher, classroom, school, district/province) and the impact of such "embedded" factors on any level of academic performance.

4.9 observer bias - many researchers set out with a prior ideas or assumptions of what constitutes an effective school others rely heavily on nominations of exemplary schools without "[corroborating] a schools reputation with objective data" (Ralph & Fennessey 1983, p.689).

4.10 theoretical weaknesses - many studies are good at listing characteristics of unusual schools but few provide coherent theoretical accounts of how individual factors interplay within the organisation and culture of the school.

4.11 problems in causal ordering - many studies assume that school effectiveness variables (such as "high expectations") cause exceptional performance when in fact such variable may simply be a consequence of school success.

5. CLUSTERING OF EFFECTIVE SCHOOLS RESEARCH

For the purpose of a review, it is important to distinguish the broad concepts used in the school effectiveness literature, since different authors employ the same concepts in somewhat different ways and contexts.

Clark et al (1984) divide the corpus of literature into "two lines of inquiry:"

(A) The literature on "instructionally effective schools" (IES) which has as focus a measure of student achievement.

(B) The literature on "school improvement" (SI) which focuses on the extent to which a school adopts an innovation.

In the former case (IES), the question is whether altering resources, processes, and organisational arrangements will affect student outcomes. In the latter case (SI), the issue is whether schools can change and, if they can, how they do it (p.42).

A different way of clustering this literature is pursued by Purkey & Smith (1983) who distinguish four groups "

- A. outlier studies - these studies distinguish highly effective (positive outliers) and highly ineffective (negative outlier) schools.
- B. case studies - these studies offer detailed descriptions of small samples of schools or individual schools.
- C. program evaluations - these studies assess existing programs in order to explain school-level performance related to these programs.
- D. "other studies" - these studies, also cited in the school effectiveness literature, do not fit the above three categories and cover a range of interests e.g., comparing private and public schools.

Yet a third categorization is provided by Ralph & Fennessey (1983) who distinguish:

- A. the study of effective schools - these studies focus on schools and important differences among them.

- B. the study of school effects - these studies focus on school- and classroom- level variables that have an "effect" on student achievement.

And finally, a fourth approach to desegregating this literature comes from a 1984 Northwest Regional Education Laboratory Study titled, "Effective Schooling Practices: A Research Synthesis." This study identifies six components of the "research base" on effective schooling:

- A. school effects research - studies of the school to identify practices that help students learn (contrast this definition with that provided by Ralph & Fennessey 1983).
- B. teacher effects research - studies of effective teaching practices.
- C. research on instructional leadership - research on principals and effective support of teaching and learning from the school administration
- D. curriculum alignment research - studies of effective methods of organising the curriculum.
- E. program coupling research - studies of practices at different levels in the educational system.

F. research on educational change - studies of practices that promote change in schools or programs on a sustainable basis

This brief survey of approaches to clustering the research is useful in that it illustrates (i) the usage of different concepts (and language) to explain the same educational events, (ii) emerging patterns of research in an otherwise amorphous weight of effective schools research and (iii) the danger inherent in drawing on studies without determining the meaning of assigned by different authors to the events being studied.

But the most important language issue of concern is the label effectiveness and its relationship in the literature to associated concepts such as efficiency.

6. CONCEPTS IN SCHOOL EFFECTIVENESS STUDIES

By now it should be clear that different authors on the subject use the term "effectiveness" in many different ways. In D' Amico's (1982) review he found definitions which ranged

....from percentage increases in reading aptitude [Edmonds & Frederiksen 1979], to simultaneous increases and decreases in maths and reading scores [Brookover and Lezotte 1979], to passing grades on national comprehensive examination [Rutter et al 1979] to a pot pourri of school determined, standardized, and curriculum specific test results [Phi Delta Kappa] (p.8).

One of the most useful efforts to untangle the effectiveness-related concepts in this literature was recently provided by Don Adams (1993) whose primary concern is the concept of education quality with a particular focus on international education research. Adams (1993) distils from the literature the following terms and their uses:

1. QUALITY AS RESOURCE INPUTS
textbooks per student
teacher qualifications
teacher : student ratio
2. QUALITY AS OUTCOMES/OUTPUTS
academic achievement (test scores)
personal income
progression/pass rates
3. QUALITY AS PROCESSES
teacher-student interaction
levels of learner participation
engagement in learning
4. QUALITY AS CONTENT
contemporary/cutting-edge content e.g., integrated studies
coverage of the basics
5. QUALITY AS REPUTATION
general public perception
historical image
6. QUALITY AS VALUE-ADDED
influence on overall development of the student/students

Having reviewed the extensive literature on effective school (primarily) in the United States, it is time to state the central thesis of this review: In its theory language design, methods and conclusions, the effective schools literature works strictly within a positivist paradigm which assumes that school basically consist of interrelated units which can be "fixed" by applying the right mix of policy and resource inputs which would result in greater effectiveness. With few exceptions (Dantley 1990), the so-called "critical reviews" have engaged this literature on the same functionalist terms within which the original literature has been framed. Other theoretical, epistemological philosophical perspectives on changing schools are effectively (sic) silenced in this literature. As a consequence, our understandings of the nature of schooling and the problem of change have been limited. An alternative research model is required. However, an important caveat: this antique does not assume that schools cannot be changed or that schools are institutions that are "determined" by political or economic forces beyond the reach of practitioners or policymakers. Rather, the argument suggests that existing theoretical and methodological procedures limit understanding of change. But before outlining the alternative, we now examine and assess the cross-national transfer and application of these findings in the developing world.

SECTION B

THE TRANSNATIONAL CHARACTER OF EFFECTIVE SCHOOLS RESEARCH

1. INTRODUCTION

The proposition that the knowledge produced through research functions as a transnational exchange (in same way as capital) from "first" to "third worlds is not novel (Weiler 1989; Kumar 1979; Jansen 1991). What remains striking, however, is (a) the intensity with which the American British research on effective schools was transported to the developing world despite enormous context differences.

In this section we review dominant in transnational research applications in developing countries, and assess the limitations of this corpus on effective schools in such settings.

2. TRENDS IN TRANSNATIONAL RESEARCH ON EFFECTIVE SCHOOLS

Research on schools has made its journey from the West into developing countries through three primary "carriers:"

1. international funding agencies, such as the World Bank and USAID, and their research or consultancy teams;
2. international research associations, such as the International Project for the Evaluation of Educational Achievement (IEA);
3. individual researchers, often doctoral students from the West, conducting doctoral research or specially-funded research investigations.

However, the World Bank studies have by far been the most influential in Third World educational policy systems.

By the start of the 1970s, at least 14 major studies of school effects were completed in the national education systems of developing countries (Simmons & Alexander 1978). Barely a decade later, another 26 national studies were identified for review in developing states (Schiefelbein & Simmons 1981). Given the paucity of research in developing countries, and the costs associated with large-scale studies, these were impressive accomplishments - characterized by three important directions. First, and without exception, these studies were modelled on the methodologies of the Coleman Report using national survey data, cast in multivariate statistical techniques which link "determinants" (such as resource, school buildings, teachers etc) to certain achievement patterns among students, and modelled on the concept of "production functions" with its origins in economics. Second, studies in developing countries were interpreted as "consistent" with U.S. studies (Coleman et al) which indicated that "student backgrounds markedly affect their achievement" (Myers 1981, p.6). However, even in these early studies initial differences were emerging which suggested that: "the combined 'school effects'.... sometimes outweigh the non-school effects on achievement" (Myers 1981, p.6). And third, these studies were all designed and funded in the USA (with a minor contribution from the United Kingdom), transferred to developing countries (mainly in Latin America) by individual researchers and research institutions from the West, and imposed as a research agenda on countries barely emerging from the end of colonial rule. The table below illustrates a subset of such studies from this early period in developing states.

TABLE B

DESCRIPTION OF SYSTEMS STUDIES EXPLAINING STUDENT COGNITIVE ACHIEVEMENT IN AFRICA

Author(s) and Publication Date	Country	Sample		R Range	Measure of Student Academic Achievement
		Primary or Lower Secondary grade	Upper Secondary grade		
Youndi, 1971	Congo	-	1450 students in grade 11 and 12 randomly selected from 25 secondary schools	-	Individual scores on IEA multiple choice tests in French and mathe- matics.
Simmons, 1972	Tunisia	44 students from village and 80 students from an urban suburb, grades 4-8	-	-	Individual scores on multiple choice tests in Arabic, French, and arithmetic.
Thias-Carnoy, 1973	Kenya	3405 rural grade 7 students in a random sample of 89 schools	-	-	Average student scores on Kenya Preliminary Examination for for each school.
		-	Grade 11 students in 115 rural and urban schools	-	Average student scores on Cambridge School Certificate Examination for each school.
Carnoy-Thias, 1974	Tunisia	6195 students in grades 7-11 randomly selected from rural and urban secondary schools	-	-	Individual student grade point averages on school examinations.
Heyneman, et al. 1977 (data 1972) (Table 2)	Uganda	2293 grade 7 students in 67 schools	-	35	Individual scores on Uganda school selection exams in English, Mathe- matics and general knowledge

The statistical procedures for these studies were all ordinary least squares procedures.

Adapted from: Schiefelbein & Simmons (1981), p. 17

By the 1980s, a second generation of effective schools research matured in developing countries, using more sophisticated statistical techniques and financed almost exclusively by a single institution - the World Bank. While studies in the 1970s showed that schools in the Third World had little influence on achievement (Simmons & Alexander 1978), subsequent research "suggests that the school institution exerts a greater influence on achievement within developing countries compared to industrialized nations, after accounting for the effect of pupil background" (Fuller 1987, p.255-256; also, Heyneman & Loxley 1983).

The task of this second generation of research was to identify which school factors were stronger determinants of achievement and therefore better "investments" in developing countries. As demonstrated in the Tables below, the single most important finding to emerge from this research is the significance of textbooks and other "material inputs" as a factor in explaining school achievement. Study after study from the World Bank worked within a methodology which drew the same conclusion: textbooks matter (Lockheed & Vesspoor 1991; Fuller 1987; Heyneman et al 1981).

TABLE C

**What School Factors Boost Achievement
in the Third World?**

School factor	Number of studies	Number confirming achievement effect
Highly effective		
Textbooks and instructional materials	24	16
Years of teacher training	31	22
School library activity	18	15
Length of instructional programs	14	12
Pupil feeding programs	6	5
Less effective		
Reducing class size	21	5
Science laboratories	11	4
Teacher salaries	14	5
Pupil repetition of grades	5	1

From: Fuller & Heyneman (1989), p. 16

TABLE D

Study	Country	School inputs, teacher attributes, pedagogical practices assessed
Primary school studies <i>Glewwe et al (1993)</i>	Jamaica	School inputs, pupil tests, time in school, classroom activities, gender effects.
Haitaian Foundation (1991)	Haiti	Instructional time, teacher preparation in-service training.
Harbison & Hanushek (1992)	Brazil	Textbooks, exercise books, facilities teacher training, subject-matter knowledge, multigrade classrooms, salaries, class size
Johnson (1992)	Swaziland	School library, facilities, instructional time, school size, text books, desks, teacher training.
Lockheed (1991) & <i>Bianchi (1988)</i>	Nigeria	Complex use of teaching materials class size, teacher gender, testing of pupils
Lockheed, Fonacier,	Philipines	Class size, school size, teacher training, use of science lab, group work, pupi assessment.
Mullens (1993)	Belize	Teacher training and prior achievement of teachers.
Nyagura & <i>Riddell</i> (1992)	Zimbabwe	Textbooks, teacher gender, age, training level, planning time, class size, instructional time, teacher experience

Adapted From: Fuller & Clarke (1994), p. 148

By the end of the 1980s a third generation of effective schools research emerged which criticized statistical deficiencies of "single-level regression models" in which important variations between students and classes of students are lost in "aggregated data" (Riddell 1989). Drawing on the influential work of Harvey Goldstein (1987), these researchers argued for the application of multilevel models which

...are unique in being capable of analyzing data simultaneously at different levels of the educational hierarchy - at the pupil level, the level of the classroom, and the level of the school... (Riddell 1989, p. 488).

Less prolific, and certainly less-well funded than the World Bank Research of Heyneman, Fuller and others, research on multilevel modelling techniques remained limited to a few individual researchers (Lockheed & Komenan 1989). It is important to note, however, that the Riddell critique argues within the effective schools paradigm; it searches for statistical improvements on an existing model of research on schools (Riddell & Nyagura 1991).

Southern African states have not been immune to the effective schools research agenda. Three examples are often cited in the literature.

Botswana was an early candidate for studies modelled on the Coleman Report and later research (Kahn 1978; Hoxley 1984). However, research also emerged which focused on classroom studies using observational instruments and other qualitative measures

of performance and quality (Snyder & Fuller 1991; Snyder & Nagel 1988; Prophet & Rowell 1990). Botswana was also one of the first African countries to host a Symposium on School Effectiveness Research at the University of Botswana in 1990 (Yoder 1990).

Zimbabwe was another fertile arena for studies of school effectiveness. By the mid-1970s there was already a local research studies showing the insignificance of student's economic status for predicting academic achievement (Dorsey 1975). On the other hand, more recent studies, employing multilevel methodologies, made the reverse argument viz., that

the influences which have moulded a child before he or she reaches secondary school constitute more significant influences on the child's academic achievement than factors to which the child is exposed in the secondary school classroom (Riddell 1988; Riddell 1989).

There has been little sustained debate on this topic in the Zimbabwean literature. Nevertheless, in January 1992 in Gweru, Zimbabwe, senior Zimbabwean educators developed performance indicators which would be used in planning and assessing the effectiveness of rural schools in Zimbabwe (Heneveld 1993, p.74).

South Africa, in part because of its isolation from participation in international research initiatives and model, did not participate in Coleman-type research. However, South Africa recently gave birth to a range of studies on school effectiveness and educational efficiency. These studies are by

no means coherent in either ideology or method. Some reports are at pains to celebrate ethnic nationalism as the answer for "mediocre, low-achieving black schools" (Jacobs 1991). Other studies are assessments of self-reports by principals of school effectiveness (Carrim & Shalem 1993). Yet a third set of studies reviews the relationship between academic achievement and educational efficiency (Chetty 1992). Despite these disparate strands in the South African literature, there exists for the first time an attempt to examine seriously what happens inside classrooms as the basis for policy and planning.

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REBUILDING THE CULTURE OF LEARNING

24 March 1994

Susan Meyer
EDUPOL
The Urban Foundation

1 INTRODUCTION

Effective schooling is a national priority

- Quality is equity; only selective expansion necessary
- Breakdown in the culture of learning
- International comparators on mean education level
- System failure
 - Waste
 - Demotivation

The Urban Foundation's interest in this area

- Concern with sustainable national development, equity and the quality of education
- Development work in 5 regions
- Policy work
 - Short-term : conceptual overview
 - Medium-term : policy implications drawn from pilot projects

2 THE SOCIAL CONTEXT OF EDUCATION

- Political system
- Economic status and prospects
- Social conditions
- Culture

3 THE GOALS OF EDUCATION

To serve society

- Contribute to economic modernisation
- Preserve cultural heritage
- Promote national cohesion
- Reduce socio-economic disparities
- Contribute to population development programmes
- Promote environmental conservation

To serve the individual

- Prepare him/her for employment
- Enhance his/her general quality of life

4 DEFINITIONS OF EFFECTIVENESS

The distinction between formal and substantive quality

- Inputs or resources
- Outputs, e.g. examination results
- Value-added
- Cost-effectiveness
- Internal efficiency
- External efficiency
- Reputation of school
- Curriculum content
- Process

5 MEASURING EFFECTIVENESS

- Input-output measures
- Cost-effectiveness indicators
- Internal and external efficiency rates
- A set of fundamental quality level indicators (FQL)
- Observation
- School inspection
- Performance evaluation at school level
- Self-evaluation

6 KEY FACTORS IN EFFECTIVE SCHOOLING

Enrolment rate

- Access and quality
- Demographic factors
 - Population growth
 - Migration and urbanisation
- Socio-economic factors
 - Value attached to education
 - Poverty
- Wastage
 - Dropout rate
 - Repetition

An appropriate mix of inputs

- Time on task
- Basic facilities
 - Tables, chairs and bookshelves
 - Exercise books and writing materials
 - Classroom space
- Teacher qualifications
 - Minimum qualification level
 - Median in school/system
- Learning materials
 - Textbooks the most cost-effective input
 - Standardised learning materials can improve standards
- Technology
 - Interactive radio
 - Computers in classrooms not cost-effective
- Class size
 - Pupil-teacher ratio of up to 45 : 1 at primary level
 - Not too much variance around mean national class size
 - Pupil-class ratio
- High costs
 - Teacher costs and power of teacher unions
 - Inflation
 - Escalating interest on international loans
 - Opportunity costs

Governance

- Management and administration
- Information systems
- Collaboration and partnerships
- School leadership, including management, instructional leadership and administration

Language of instruction

- Early instruction in the mother tongue
- Parents' demand for English as medium of instruction
- Teacher competence
- Economic and political considerations

Curriculum

- Relevance
- Evaluation systems and procedures

Capacity to learn

- Preschool
- Family background
 - Culture of reading
 - Study environment
- Health and nutrition

The pupil's motivation

- A nationally recognised qualification system
- Employment opportunities
- Parents' aspirations for their children
- Teachers' expectations

The teacher's motivation and commitment

- Material incentives
- Recognition and status
- Working conditions
- Support
- Professionalism

Teaching and learning

- Teaching styles and strategies
 - Inductive methods
 - Feedback and evaluation
- Learning styles and strategies
 - Problem-solving
 - Peer teaching

Parental and community involvement

- Contribute to provision of facilities
- School development committees
- Teacher aides

7 THE CURRENT POSITION IN SOUTH AFRICA

The breakdown of the culture of learning : 4 sets of factors

Financial and/or material constraints

- Excessive pupil-teacher ratios
- Excessive pupil-classroom ratios
- Inadequate or vandalised facilities
- Inadequate provision of materials

Governance and administration

- Appointment and leadership of principals problematic
- Large schools
- Inadequate planning
- No parental involvement
- Lack of punctuality
- Problems in requisitioning facilities and resources
- Delivery problems
- Poor information and communication
- Disruption due to many teachers studying
- No SRCs or contested
- Disruption of supervisory services
- Corruption and fraud

Teaching and learning

- Many un- or underqualified teachers
- Teacher overload
- Teacher absence
- Irrelevant curriculum
- Inadequate teaching and study methods
- Abuse of corporal punishment
- Suspicions and frustrations regarding examinations
- Language difficulty
- No culture of reading

Socio-political factors

- Legitimacy crisis
- Youth politicisation
- Rejection of adult authority
- Little participation by women/girls
- Victim/blame syndrome
- Culture of violence
- Generational conflict/alienation
- Poverty
- Teenage pregnancy
- Promiscuity and sexual exploitation
- Substance abuse

8 INTERVENTION : STRATEGIC AND PRACTICAL CONSIDERATIONS

A complex issue

- Applicability of international findings needs to be tested empirically in SA
- Many interactive factors
- Contextual sensitivity
- Compounding effect of political legacy in South Africa

An integrated approach

- UNESCO's 3-pronged approach
 - Educational strategies
 - Community action
 - Multisectoral strategies
- Three crucial levels for intervention
 - System, school and classroom
 - Tensions between quality concerns at different levels

Realistic time-frames

- Short term
- Medium term
- Long term

Partnerships at all levels

At the provincial and ministerial levels

- Multisectoral initiatives within the state
- Partnerships between the state, statutory bodies and other sectors

At the local level

- District-focused programmes

At the school level

- School-focused programmes
- Community-focused programmes

Selection criteria for pilot programmes

- National/regional targets
- Whose priorities?
- Index of need
- Demonstrated commitment and capacity for change
- Evaluation components

Proposed areas for action

For long-term impact (10 - 20 years) :

- System focus on national economic growth
- Overhaul school curriculum and examination system

For medium-term impact (5 - 10 years) :

- National and/or provincial targets
- Community development projects in rural and peri-urban areas
- Improved information systems at all levels
- Improved PRESET curricula and delivery

For short term impact (1 - 5 years) :

- National survey
- Minimum learning conditions
- Pupil health and nutrition schemes
- Legitimate governance structures
- Codes of conduct for organisations and schools
- Capacity building programmes
- Whole-school development
- INSET

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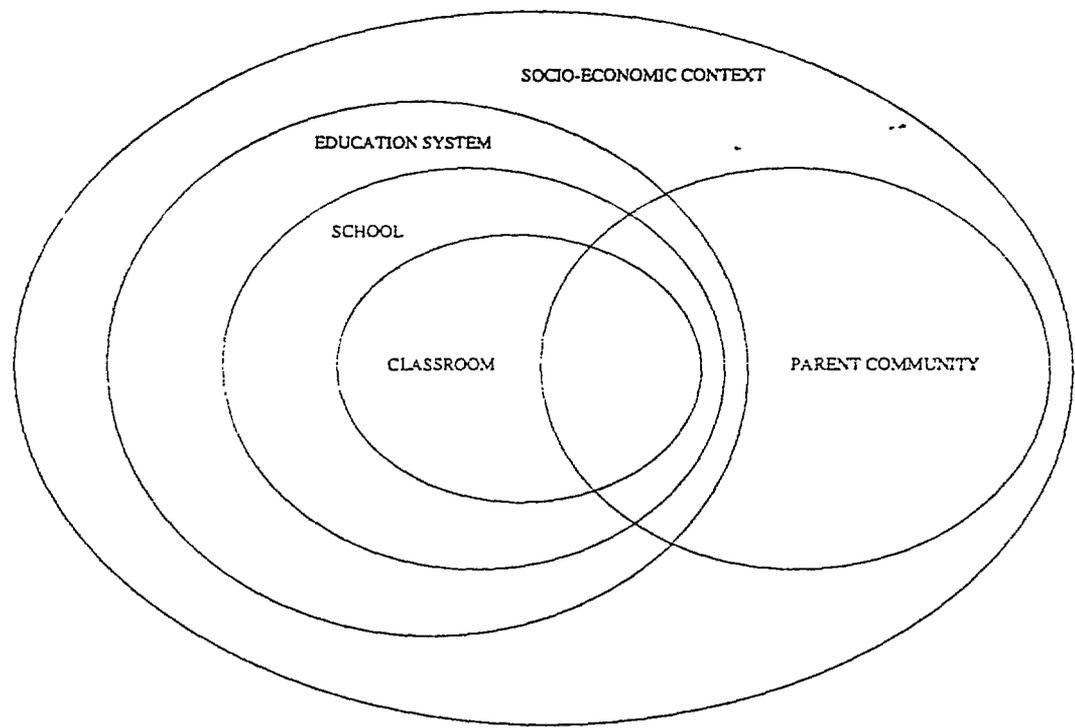
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EFFECTIVE SCHOOLING : CRUCIAL INTERVENTION LEVELS



POSSIBLE MATRICES FOR ANALYSIS AND INTERVENTION STRATEGIES

TABLE 1 : IDENTIFICATION OF NEEDS

	PHASE 1	PHASE 2	PHASE 3
FACILITIES & RESOURCES			
ADMINISTRATION & MANAGEMENT			
PEDAGOGIC FACTORS			
SOCIO-POLITICAL FACTORS			

TABLE 2 : PLANNING STRATEGIES

	EDUCATIONAL STRATEGIES		COMMUNITY ACTION	MULTISECTORAL STRATEGIES
	SCHOOL	DEPARTMENT		
FACILITIES & RESOURCES				
ADMINISTRATION & MANAGEMENT				
PEDAGOGIC FACTORS				
SOCIO-POLITICAL FACTORS				

TABLE 3 : IMPLEMENTATION

TASK	RESOURCES NEEDED	RESPONSIBLE PERSON/GROUP(S)	TIME-FRAME

Upgrading and Strengthening Practical Work
in South African Schools

PADDY LYNCH

ACRONYMS

FRD	Foundation for Research Development
DET	Department of Education and Training
TED	Transvaal Education Department
SEP	Science Education Project
STA	Scientific Teaching Aids
STS	Science Technology and Society
HOR	House of Representatives
CED	Cape Education Department
NED	Natal Education Department
PSP	Primary Science Programme

INTRODUCTION

The purpose of this study is to identify key issues and constraints which need to be addressed in order that practically-based teaching at high school level in South Africa can be strengthened and up-graded in the immediate future. By identifying these issues and making prioritised recommendations, the feasibility study should pave the way for action plans to be formulated by appropriate teams of teachers, educators and specialist consultants.

The motivation for this initiative was provided by the UNECA/ECA request for a feasibility study to be undertaken by individual Member States in regard to their **capability and capacity to produce school science equipment** (Report of the UNECA Maseru Workshop, May 1993). The FRD undertook to provide a South African response to the UNECA request and at the same time extended the scope of the feasibility study to include teaching/learning parameters. Thus, this study evolved into a review of 7 domains, as follows:

1. Provision of laboratories, services, equipment and material resources
2. Procurement and maintenance strategies for schools
3. Skills and competencies, required of teachers, to organise and manage laboratory-based activities of various types
4. Curriculum constraints in regard to practical work
5. Alternative strategies to the formal laboratory
6. The primary/secondary interface
7. The secondary/tertiary interface

Each of these domains is reviewed by one or more South African science educators, each of whom has had extensive experience of the issues involved. Thus, the study is essentially a review of expert opinion. It should be read in conjunction with the two parallel reports produced for the FRD:

1. The capability and capacity of South Africa to produce school science equipment.
2. Cluster studies of the laboratory situation in South African schools.

Patrick P Lynch (Editor)
Johannesburg 1994

RATIONALE

South Africa is about to embark on an educational reconstruction process in which maths, science and technology are likely to be given special priority. The beliefs that national prosperity and the generation of social capital are dependant on such an emphasis, and that South Africa is the key to the économic revival of the sub-continent constitute a compelling driving force.

The purpose of this study, one of three in a series, is to identify key issues and constraints which need to be addressed in order that practically-based teaching at high school level can be strengthened and upgraded in the immediate future.

Practically-based teaching in South African schools has strong support from teachers and educators. However, effective teaching requires that a number of key issues are addressed simultaneously and take into account a context which is characterised by its variability.

Advisory Steering Committee and Writing Team

In order to establish a collective response from authentic workers in the area, a process of networking was used. Individuals were approached who were clearly very active in the area or had a considerable track record associated with practical work. This group provided an Advisory Steering Committee (ASC) which was instrumental in defining the purpose of this study and the two complementary studies. The ASC advised on the key parameters of the report and on the choice of instruments used to acquire information.

A sub-set of the ASC then undertook the task of writing the individual chapters for this study, choosing domains which best fitted their current situation and experience. The ASC and Writing Team members are listed subsequently.

ADVISORY STEERING COMMITTEE

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THE WRITING TEAM

Each chapter in the report was written by an individual or group of writers, marked '*' in the ASC list. There were some differences in approach. Kanti Naik and Peter Spargo draw mainly on their own extensive personal experience of the situation. Magnate Ntombela provides a theoretical framework for curriculum constraints. Lawrence Manana, consulting with others, puts SEP in perspective as an alternative to the formal laboratory. Tom O'Neill's chapter reflects the pragmatic approach of the CASME group. John Bradley, Colleen Smith and co-workers provide a collective response from the RADMASTE outreach with teacher educators. Paul Webb and Di Raubenheimer describe PSP policy and experience in relation to high school work.

No exclusivity is intended and any science educators who wish to be involved in any subsequent initiatives should make their interest known to the nearest member of the writing team or the FRD. The task of reconstruction is a formidable one and will make great demands on creative input and goodwill.

SUMMARY OF FINDINGS

Each chapter in this report provides a description of the South African situation for that particular issue, identifies major constraints, and prioritises those constraints in relation to possible action.

This 'describe-identify-prioritise' strategy was adopted by all chapter writers though what counts as description was interpreted differently. The extent to which educational, historic-political or functional aspects are emphasised, was left to the individual or group writers. After all, these perceptions represent the context of present debate. For that reason the other two parallel studies become important. The UNECA/ECA report explores material provision (laboratories and equipment) and focuses on the functional aspects of that provision. The Cluster Studies report attempts to provide an educational description in terms of 'real' teachers and 'real' laboratories in different regions of South Africa.

The chapter writers were aware of the other two studies and had access to their findings. Indeed, reference is made to them in text. Consequently, this summary of findings also refers, where appropriate, to the other two studies.

Chapter 1 Provision

1.1

Two pre-requisites came through strongly.

Firstly, practical work needs to be prescribed and assessed, internally or externally, and secondly the syllabus must be shortened to accommodate this. Provision of facilities will not on their own generate laboratory-based teaching without supportive curriculum/assessment procedures.

1.2

The provision of formal laboratories, services and equipment in the DET (and Independent Territories) schools will have to be seriously and objectively assessed. However, initiatives such as SEP, which attempts to provide at least an interim solution to a non-formal laboratory situation, must be considered.

1.3

In areas where formal functional laboratories can be built then the principles of modular design need to be taken into account such that size and space requirements and upgrading sequences can be accommodated. This would not solve the problems for older and transitional schools where pre-fabricated complexes may need to be designed or supplied.

1.4

The supply of qualified laboratory assistants or some strategy for allocating responsibility for laboratory care, need to be established.

1.5

Instructional and informational aspects are much neglected and these could have a considerable impact (including a decorative aspect) on classroom and laboratory environments. The history of scientific ideas, great scientists, technology and society, student misunderstandings are all important contemporary themes which in the form of posters would do much to enrich the learning environment.

Chapter 2 Procurement and maintenance

Procurement and maintenance are most crucial features and the evidence from the Cluster Studies is that in South African schools they are in need of serious attention. The questions that need to be explored relate to how these services can be performed quickly, cheaply, and conveniently. These services usually also need to be associated with advisory assistance.

The author reviews four possible models for the supply of equipment and materials and clearly favours model (d) as follows:

- (i) purchase continues to be carried out by competitive tender but decisions need to be made as to whether this is carried out centrally or on a regional bases.
- (ii) that selected Colleges of Education could be designated as distribution centres and this overall process be seen as related to the Science Education group at that College.
- (iii) criteria for national minima be set for the supply of equipment and materials.

The author recommends that maintenance strategies, which at present are largely absent, should also involved the Colleges and

- (iv) training components dealing with maintenance should be introduced into PRESET course.
- (v) a national manual dealing with maintenance should be produced workshop.
- (vi) a workshop unit devoted to maintenance should be attached to selected Colleges.

Chapter 3 Science teachers competencies and skills in practical work

The author makes the point that it is hard to completely separate teacher competencies in science practical work from broader competencies in science teaching.

Nevertheless, he attempts to provide a list based on three domains:

1. Being able to do the practical oneself
2. Being able to use the practicals for teaching
3. Being able to manage the science facilities

Subsequently, the argument is developed that skills only are not the answer as we must take into account the teacher's attitude and/or extent to which he or she values practical work. Added to which the present assessment system does not encourage practically-based teaching, in fact quite the opposite.

Recommendations are more implicit than explicit but include a rethinking of training opportunities and in-service and pre-service programmes. The writer observes that existing teacher trainers need to be much more familiar with the context in which their trainees will be teaching. He concludes with a comment on motivation.

Both sectors (INSET and PRESET) also need to look closely at how teachers can be motivated to include practical work.....changing assessment is part of the answer.....somehow they (teachers) have to be enthused, they have to themselves recognise the importance of practical work in science, so that they can know exactly what it is that they are depriving their students of when they omit practical work from their curricula.

Chapter 4 Curriculum constraints

Curriculum constraints peculiar to South Africa are compounded by the fact that there is a considerable revision of school science taking place in most countries. Movements such as 'Science for All', 'STS', 'Eco-science' and the findings of research into students alternative frameworks have had a major effect on educators' expectations of what constitutes a 'good and appropriate' curriculum. These shifts of perspective are discussed by the author in relation to the South African situation. A revision of goals also requires both a revision in the choice of practical activities and of their assessment.

The recommendations are prefaced by a plea that the 'official' curriculum takes cognisance of the prevailing conditions at the chalkface. The author's own work, and that of other South African studies including the Cluster Studies suggest that at the moment a huge gap exists (particularly in DET and independent territories schools) between the 'official' curriculum and what is actually taking place.

The summarised major recommendations are as follows:

4.1

Practical work that pupils engage in should be compatible with accepted views of how learning takes place. It should be more than conventional laboratory benchwork and should take into account ecological work and the use of familiar (African) phenomena and materials.

4.2

Curriculum policies should explore the provision and use of economical and robust science kits. Colleges of Education, as well as schools, need to be taken into account. (See Chapter 7)

4.3

There is a need to create the post of laboratory 'technician' or 'assistant' - which could be in the form of a teaching responsibility for an individual teacher.

4.4

The school's organisation of the timetable should be flexible enough to encourage practical work (The 35 minute period does not permit a practical approach).

4.5

Opportunities need to be created for teachers to take part in the curriculum decision-making process.

4.6

Assessment should test more than just propositional knowledge which raises the issue of how practical work should be assessed.

Chapter 5 Alternatives

5.1

The basis for curriculum development using alternative strategies has already been started by the NGOS. South Africa has the capability and capacity to produce its own kits and low-cost equipment. These resources and initiatives need to be co-ordinated and expanded to meet the task of equipping schools on the scale envisaged.

5.2

As for 1.4 and 4.3.

5.3

Security and storage facilities in schools need to be improved to take into account theft and vandalism.

5.4

The strategy of 'teachers as innovators' where low equipment is concerned, should become part of a national emphasis in INSET and PRESET courses.

5.5

Supply and replenishment strategies must be improved and an effort made to establish regional equipment centres be made to overcome these difficulties.

Chapter 6 A Primary Science Response

The main thrust of this chapter concerns the primary science programme (PSP) which supplies science kits plus various printed materials to teachers. Interactive workshops and school visits are central to the total strategy. This, in many ways it is not unlike SEP. The programme has been operating for a decade in the Western Cape, Eastern Cape, Orange Free State, Natal and the Highveld with priority being given to disadvantaged communities. At present it reaches more than 6000 teachers in approximately 2700 schools. Multiplier effects would suggest that it reaches approximately 300,000 upper primary students.

PSP, with its established infrastructure, offers a mechanism for coordinating any national curriculum initiatives in the future even if, at present, it is essentially an NGO activity.

The writers of Chapter 6, Paul Webb and Di Raubenheimer, describe the primary science situation in terms of the 5 parameters associated with Chapter 5. They provide recommendations for all five considerations. Many of these recommendations parallel those put forward for secondary science:

6.1

Provision and maintenance strategies need to be developed which take into account regional needs but what is heartening is that South Africa has the capability and capacity to produce its own materials and provide the necessary support mechanisms.

6.2

Improvement of teacher competencies and skills requires a well-coordinated INSET policy - which is also discussed in some detail in 6.4.

6.3

Great attention needs to be devoted to the primary science syllabus in South Africa. There is much that is wrong with it and revision is long overdue. Section 6.5 identifies the major weaknesses. The revision process is as important as the product - which relates to point 2 and the need to have grass roots involvement through INSET, rather than a top-down set of directives.

6.4

The choice and on-going evaluation of resources, particularly written materials, is so important that an independent user forum should be established and a feed-back mechanism (involving teachers) be incorporated.

Chapter 7 Pre-service teacher education and high school practical work

Though envisaged as a tertiary science education response in the broadest terms, the writers of this chapter concentrated on what they perceived to be a major weakness - the pre-service sector, particularly the Colleges of Education. They point out that although it is difficult to provide exact statistics the Colleges of Education using DET syllabuses are training the majority of physical science teachers in South Africa. The present unsatisfactory dependence on in-service efforts is compounded by

There is a growing dissatisfaction with the effectiveness paradigm (Thiesen et al., 1983). Recently, researchers have posited organisational models of student achievement (Rosenholtz 1989), "culturally situated model(s) of school effectiveness" (Fuller & Clarke 1993), contextual models of effectiveness (Hannaway & Talbert 1993), and process models for explaining achievement (Lockheed & Komenan 1989). The production function model has slowly, though certainly not completely, been challenged in terms of its core assumptions about the nature of education, schooling and classroom processes.

Fuller & Clarke (1994), for example, take aim at what they call "the policy mechanics" who:

seek universal remedies that can be manipulated by central agencies and assume that the same instructional materials and pedagogical practices hold constant meaning in the eyes of teachers and children from diverse cultural settings (p.119).

In response, they offer a "culturally situated model of school effectiveness" which unravels the meanings, norms and patterns of socialization in the classroom.

Lockheed & Komenan (1989), on the other hand, also announce the limits of production function studies and then introduce concepts such as teaching quality and teaching processes to mark a shift towards studying what happens inside classrooms.

Both sets of studies signal the beginnings of a discontent within the same community which advocated input-output models of

school effectiveness through the 1980s. It is not an easy shift, one marked by contradictions. For example, Fuller & Clarke (1994), fall into the trap of assigning cultural (and therefore educational) homogeneity to entire African states so that "teachers in Soweto" are marked different from their counterparts "elsewhere in the Southern African region." A closer-examination would have shown that within Soweto there are myriads of expressions of teaching and learning processes depending on factors such as levels of political disruption, degree of community participation, spatial location of the school (township versus informal settlement schools, for example), exposure to training and support from non-governmental organisations and so forth (Carrim & Shalem 1993).

Lockheed & Komenan (1989) show promise of moving beyond production functions only to operationalise education quality concerns within a slightly modified regression analysis model. Quality and process are simply variables to be added into a multiple regression calculation.

Clearly, in many circles education quality is still conceptualised within the epistemological and methodological shadows of its predecessor, educational effectiveness. However, there is a small but discernible literature which takes as its starting point the understanding of education quality as concerned with [1] processes of teaching, learning, testing, managing and resourcing which [2] must be investigated on its on terms i.e., through in-depth qualitative investigations of such

processes, and [3] drawing more deliberately on insider perspectives of what happens inside classrooms (Sato 1990; Prophet & Rowell 1990; Ntshingila-Khosa 1994).

One of the most significant documents reflecting the emerging paradigm of education quality as school- and classroom-level processes comes from within the World Bank and is entitled Research into Practice: Guidelines for Planning and Monitoring the Quality of Education in Sub-Saharan Africa (Heneveld 1993). This document argues for a revision of current assumptions informing methods of policy and planning, towards a new approach which recognizes:

- (1) that operations within school and classrooms... are to a large extent independent of national policy;
- (2) that the educational process in individual schools contributes significantly to the effectiveness of education; and
- (3) (school-level) factors are not independent but come together within the school to form a social system that conditions the learning that can take place there (Heneveld 1993, p.6).

It remains to be seen whether the Heneveld proposal on quality translates into large scale funding of school-level research and investments comparable to the effectiveness agenda which dominated the decade of the 1980s. Nevertheless, this document signalled a substantive research shift in the thinking of some World Bank officials which accords with developments elsewhere in the educational research community.

One country in which there has been an explosion of education quality research within this emerging paradigm is South Africa. Individual researchers are increasingly concerned with the processes of teaching, learning, testing, managing and resourcing at the school- and classroom levels (Ntshingila-Khosa 1994; Carrim & Shalem 1994; Sullivan 1994). Major in-country literature reviews argued specifically for an approach to the study of schooling which moved beyond the effectiveness paradigm and examined the processes, qualities and cultures of school and classroom life (Jansen 1994; Chetty 1993). A recent national conference in Cape Town (March 1994) brought together seven large-scale school effectiveness/quality projects which suggested extensive studies in classrooms was likely to emanate from South Africa. And a host of large non-governmental organisations (NGOs) in South Africa have defined their research and evaluation tasks as investigating education quality and its link to improving classroom practice and policy direction under a democratic system of government.

Another significant development is the advent of an international research project, Improving Education Quality (IEQ), funded by the United States Agency for International Development (USAID). Offices of the IEQ Project have been established in five developing countries viz., Mali, Ghana, Gautemala, South Africa and Uganda, with the following objectives:

1. to understand the processes through which classroom interventions in different countries influence student performance

2. to demonstrate a process whereby classroom research on improving education quality is integrated into the educational system
3. to create opportunities for dialogue and partnership among researchers and educators who are seeking to improve educational quality at local, regional, national and international levels.

Finally, the educational research community, in both Third and First World contexts, have started to criticise the homogenising tendencies of large-scale studies and to draw attention to the complexities, unpredictabilities and uniqueness of classrooms settings even within the same countries (Thiesen et al., 1983; Sato 1990; Hannaway & Talbert 1993). Clive Harber (1992) is not alone in his assessment that:

despite a mountain of published writings on education, we still know relatively little about the everyday reality of schools and in particular how key actors carry out their roles (p.162).

Informed by extensive studies on implementation, researchers (McLaughlin 1991) are calling for a shift towards understanding (the "why" and "how" of implementation) at the classroom level rather than simple quantifiable outcomes (the "what" and "how much" of conventional implementation studies).

In conclusion, this document assessed the trends in effective schools research largely within the North American literature, reviewed the transnational impact of the effective schools paradigm with specific attention to developing countries, and outlined the beginnings of an alternative approach to schools

which takes as its starting point the complexities of what happens inside classrooms rather than simple input-output analyses of schools associated with earlier approaches.

The success of the effective schools paradigm depended not only on the development of a coherent research agenda by academics, and the support of practitioners for adopting such an agenda for implementation, but also on the generation of large-scale funding support from international development agencies. The education quality paradigm will require similar support if it is to make an impact on education practice in schools and classrooms of the global education system.

INTERNATIONAL SCHOOL EFFECTIVENESS RESEARCH

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EMPIRICAL FINDINGS

Class sizes ranged from 17 to 40 students. Basic learning material such as textbooks, pens, exercise books were observed taken by students from the bags. As a result no teacher was observed distributing material to the class. All but one classroom were organized in conventional rows. In more than 90% of classrooms, students shared desks with peers of the same gender except in less than 10 % of classrooms.

Table 1. How teachers and students employed instructional materials during the first 8 minute slot of the lesson (percentages)

Material Used during the first 15 minutes	% Use by Teacher	% Use by Pupils
1. Chalkboard	77	14
2. Textbook	23	23
3. Exercise book		54
4. Other material	23	0

The first line in Table 1 indicates that while the teacher was using the chalkboard, the students were listening and reading quietly from their textbooks. This means that in 17 of the 22 segments, teachers were lecturing from the chalkboard. Some students did write something on the chalkboard during this time. Exercises were used to write notes in 54 % of the observed segments. Science teachers used additional material other than basic chalkboards and textbooks.

Table 2. Teacher Talk and Classroom Socialization (percentages)

Teacher or student action	Percentage out of 22 classroom cases
Teachers action:	
Lecture with no questions	40
Assigning written work	0
Monitoring classwork	9
Level of cognitive demand	
simple questions	77
complex questions	54
recitation	31
encourage discussion	18
encourage debate	14
Student volunteers question	23
Students are inattentive for more than five minutes	23
Students talk to each other	37

Table 2 reports on the type of communication between the teachers and their pupils. Here the observer recorded the talk by teachers: requests to recite material, questions, or disciplining and quieting the students. The questions asked by the teachers were categorized as simple requiring recall or requiring more complex analysis. This, including requests to discuss or debate indicated the social forms and rules enacted in classrooms and the cognitive demands placed on the students. Table 2 shows that the rate at which teachers requested students to recite material was low (7 out of 22 cases). Simple recall questions were asked at a much higher rate than complex questions (77 % and 55 %, respectively). In addition, students initiated questions very rarely (23 %). Discussion and debates between teachers and students and among students were observed very rarely.

Table 3: Time use By the Teacher (percentages)

Overview of teacher activities	Percentage Estimate of activity
All class time spent Lecturing	18
Administrative tasks	-
Monitoring seat-work	18
Marking homework	-

The teachers in this case study allocated their entire class teaching time to academic tasks. Table 3 shows that none of the teachers spent time on administrative tasks while only 18 % corrected class-work or homework during their lessons. This shows that most of the teachers use the allocated time for teaching purposes. It is also in contrast to American teachers in a study by Stallings and Kaskowitz (Fuller and Snyder, 1991) who spent most of the class time doing administrative work. In addition, only 4 teachers out of 22 spent the entire class time lecturing. In one class, the teacher spent less than 5 % of the time lecturing at the students. Students were engaged in a debate in this particular English lesson.

QUALITATIVE DESCRIPTIONS OF CLASSROOM LESSONS

The quantitative descriptions inform us about common patterns as well as variations among the teachers. The qualitative descriptions, on the other hand, describe the details of these

observed actions. For instance, we now know that few teachers initiated complex questions. But we do not know how this element of pedagogy fits into teacher's own conception of what "good teaching" means in their own minds.

Persistence of choral response despite discouragement by teachers, simple questions initiated by teachers and simple answers given by students

Let us start with the example of why choral recitation remains common in the classrooms. As teachers lecture, they direct their questions to the whole class. The students in turn reply in chorus. Teachers seem not to like this response and discourage it. However, choral responses persist as teachers consistently direct their talk to the whole class and rarely to individual students. The classroom observations confirm these findings while showing that some variation does occur across different teachers.

Case A: This is a Standard 6 (grade 8) mathematics lesson on the topic of fractions. The teacher moves to the board and starts off by writing "FRACTIONS" on the chalkboard.

Teacher: *What are types of fractions?*

This question is directed to the whole class. This teacher is asking students to give her examples of types of fraction. The teacher then faces the class and moves towards the front desks. Pupils are murmuring answers but no one is giving an answer or raising the hand up. The teacher then moves to the chalkboard and starts write and talks at the same time.

Teacher: Proper fractions. For example...?

She is asking for an example of a proper fraction from the class.

Pupils and Teacher: Half.

She then writes 1 over 2 (half) below the words: proper fraction.

Teacher: What are other types of fractions?

Pupils: Improper.

Teacher: Not in chorus form.

The teacher implies that students should not answer in chorus but should wait until she chooses a student to answer. She then starts pointing at a student to give an answer. Students start giving other examples of fractions such as improper, mixed and algebraic fractions.

The interaction so far indicates that questions are indeed mostly directed to the whole class. The answers given by students in chorus might be an indication of the fear of giving an incorrect answer. The high rate at which simple questions are asked is confirmed in this interaction. The teacher does not get students to give descriptions of these types of fractions which would allow her to get an indication of individual students' level of understanding. My lesson observations also indicate that teachers often encourage recitation by repeating the correct answers with the whole class or by herself. Students sometimes finish the sentences for, or, with the teacher.

Encouragement of recitation

Case B: The following interactions in Standard 9 (grade 11) mathematics class indicate this form of communication.

This female teacher is standing in front of the classroom, all students sit attentively listening to her.

Teacher: *Suppose you are required to prove that a triangle is an isosceles triangle. What is an isosceles triangle?*

Few students are murmuring until she asks one boy whose hand is raised to give an answer.

Pupil: *A triangle with two equal opposite sides.*

Teacher: *...two opposite equal sides. So in fact you are trying to prove that the two sides are equal.*

The teacher then draws an isosceles triangle on the board and moves to face the class.

Teacher: *When working with the "Backwards Principle", a conclusion that you could come to if you are asked to prove that two sides are equal, ...it would mean something like two*

Whole Class: *...two opposite sides are equal.*

Teacher: *Right.*

Here we note that the first answer was answered by a boy who had his hands raised. But in the second instance, she does not point at any one. So the whole class finishes the sentence.

It is also interesting to note that while the teacher is teaching, her focus is on the examination. She keeps referring to this by saying: .."*when you are asked to prove....*". The exchanges in case B above also inform us about the extent of recitation even though this was observed in few cases (31%). Here, the teacher reinforces the concepts in students by encouraging them to finish sentences or repeat every correct answer given by the student.

There is variation in the types of questions asked by teachers. Even though students ask questions less, some students also ask questions and give examples which contradict the teachers opinion as the following exchanges in Case C indicate.

Questions initiated by students and query of teacher's views by students

Case C: The next extract is from a science lesson in Standard 8 (grade 10) on the topic of de-hydration of acids⁶.

Teacher: *We are going to talk about dehydration. What is to dehydrate? When you say something has dehydrated, what has happened?*

Pupils: *There is no water.*

Teacher: *Water has been extracted out of a particular object, element or compound. In actual fact, if you have acid and it drops on your dress, what will happen? If you know, raise your hand.*

A number of hands are up. Note that in the previous question, the whole class replied in chorus. Telling the class to raise their hands is one way of discouraging choral responses. She then points at a girl who gives an answer.

Pupil: You are going to have a hole in your dress.

Teacher: You are going to have a hole. Why will you have a hole, what did the acid do?

Pupil: At times you find that your cloth remains as it is but immediately you touch it or wash it, a hole appears.

This comment signals to the teacher that it is not always the case that a hole is formed, it takes a while or until one washes a cloth in some instances.

Teacher: What has happened is that the acid has extracted water from it. So then the cloth has some water particles left. So immediately a hole is made it means that the acid has extracted all the water out of the cloth. If you wash the cloth, it falls off. That place where the acid has dropped forms a hole.

Another Pupil: The acid fell on my laboratory coat but there was no hole.

The class laughs at this comment.

Teacher: That was a diluted acid, but if it is concentrated, it will form a hole.

The same pupil: Any kind of acid?

Teacher: Yes, with some weak acid like vinegar, that is acetic acid, nothing will happen. Hydrochloric acid is strong (meaning a hole will be formed).

A dialogue between the students and the teacher took place in this class. Unlike in most classrooms, the dialogue, including student questions were not initiated by the teacher. Voluntary question and queries show the level of interest and student participation in this class. This is perhaps linked to her attempt to link the chemistry subject with what students are familiar with such as clothes, vinegar, and water. The other variation shown in this particular class is the absence of choral response to the teacher's questions. This is perhaps this teacher tells the class to raise the hands immediately after asking the question. The teacher. We now look at how teachers understood the meaning of their teaching practices.

TEACHER'S OWN MEANINGS

Questions discussed with teachers related to the interactions and forms of social rules found in their classrooms. The two questions discussed in the paper were:

What teaching practices do they use in their teaching?

ii. what is an "excellent" or "effective" lesson to them and when it has occurred, what actions took place?

Two categories emerged from the teacher responses to the first question. First, there were teachers who had practices they preferred and they used them in their teaching. Second, there were teachers who preferred practices but were not using them in their teaching. This group of teachers either mentioned methods but were not observed in their lessons. Alternatively, the practices they were using were the only option available to them.

The first group of teachers preferred using a variety of methods for various reasons. They liked using lecture methods, combining it with a question and answer method. The reason for this preference was that they were providing the students with knowledge or information. To ensure students understand the content, questions are asked frequently to the whole class. If students give correct answers, this is an indication that they understand. In this way, students are actively involved and showing interest.

I: "...well, I usually like to impart more knowledge to my kids. And asking a number of question. So there are two basic methods that I like, that is the lecture method and the question and answer method".

II: "I like dialogue, in fact where I use some question and the students in turn respond by answering. So that they take part. I must not be the one who is dominating. They must also take part in the lesson".

The second group preferred practices such as dividing students into groups, discussions and debates by the students, giving students individual attention and getting students to perform most activities by themselves. According to this group of teachers, these practices allow students to participate fully, and show their understanding.

III: "I prefer dividing them into groups, doing a certain project and in the end of the lesson, or the following day, they present to the class.they tend to be undisciplined.you spend a lot of time trying to collect information. Then the next lesson, a lot of time is wasted because it takes a lot of time for groups to present the findingsand so it is time-consuming".

Teachers in this group were not observed using these practices. They said they do try to teach using methods which involve talking less to the students such as group work or

discussions. They admit it is not possible to use these practices though they think of them as having higher cognitive value. They cited difficulties of employing this practice in their teaching. Their classroom sizes were big and hence making it difficult for them to give student maximum attention or work in groups. The lack of resources, poor fluency in English by students, familiarity of students with sitting and listening to the teacher lecture (from their primary school), lack of discipline by students during discussions and group work which leads to lack of control makes it hard for the teachers to use these practices.

One teacher has just mentioned teaching methods he uses in his lessons. When I asked if there was any particular reason for the methods he mentioned, he commented:

IV: "...That is the most practical method. That is what works. Not that I would prefer it. I would prefer a situation whereby the students would work and do the most part of the lesson and I just monitor them, but it usually does not work".

The response by teacher IV illustrates the constraints of teachers in the second group. This group is not using the teaching practices they claim they prefer using. The practices they were observed using are used because the context and constraints they face do not allow them to use practices they prefer using. Examples of mentioned constraints were time, resources, class sizes, lack of discipline by students and constant student absenteeism which resulted in inconsistency in teaching.

On the teacher's views about actions in an excellent lesson, common phrases were used by the teachers, including words such as, "catching the student's attention; participation by students; asking question; inviting questions from students; and getting feedback".

V: "An excellent lesson to me is any lesson that will actually catch the attention of students, make them participate and invite questions from them".

According to these teachers, if they keep the attention of the students and get them interested, the lesson was good. Students were also to show this by asking questions or giving feedback by answering the teacher's questions. If the students managed to give correct answers then the lesson was good. If we go back to the quantitative and qualitative data, it does seem that the students do perform these actions. i. students answer questions but rarely ask their own questions. ii. the questions initiated by teachers are typically simple questions which require students to recall. iii. very few students initiate their own questions. Perhaps the teachers pose their questions to the whole class to ensure that all students are participating. About half of teachers in this sample said they rarely or never have a good lesson. This they claimed was attributable to factors such as the political violence⁷ in the townships and the lack of motivation for schooling in students.

DISCUSSION AND CONCLUSION

The study has provided descriptive accounts of actions classroom. The classroom examples and teacher interviews were used to further illuminate the background and the detail of the observed interactions. The findings from these 22 classrooms show that basic instructional materials are available and are being used in classrooms. The materials are only limited to basic and simple materials such as the chalkboard, textbooks, exercise books. As a result, the textbooks and exercise books are used quite frequently. Additional science equipment is used by science teachers either in classrooms or laboratories. Teachers in these classrooms

talk to students a lot, asking questions which require recall at higher rate. This, however, does not mean students are passive. Students are indeed vocal, and mostly in chorus form. In some instances, students and the teachers finish the sentences together.

The observations also reveal some amount of variation in these classroom behaviours. Some students do talk without the teacher's initiation. Others even ask questions or make comments which prove the teachers examples incorrect. This variation only occurred in one standard 9 science classroom. Students in mathematics lessons also get to write and explain some answers on the chalkboard.

Interviews with teachers do confirm some of the shared pedagogical patterns and shed more light into why they occur. Teacher views also show a contradiction in how most teachers view their teaching and their actual practice. Although they spend more time lecturing, the teachers in this study indicate that they like or prefer teaching where they would talk less, allow students to discuss more and work in groups. Interviews also reveal that the high frequency with which teachers ask questions serves to ensure that students are participating and concentrating. The answers to the questions may act as a signal to the teachers that students do understand the lesson, and that the lesson is effective. Most teachers saw a good lesson as the one in which they got students to participate and invited a lot of questions from students.

These findings generally confirm findings from similar studies conducted in Botswana (Snyder, Jr. and Ramatsui, 1990), a cross-national study done in 9 countries (Anderson, 1987) and in the United States (Goodlad, 1984). However, the striking difference is the low

level at which the South African teachers (in this case study) spend their time on administrative work and monitoring student seat-work. Stallings and Kaskowitz (cited in Fuller and Snyder, Jr. 1991) study of North American teachers showed that teachers spent just 38 percent of class time engaged in academic tasks. Teachers in this study also tend to socialize their students to listen to their lecturing and answer questions in chorus. This is shown by the high rate of questions directed to the whole class. Teachers also place lower cognitive demands on students by asking simple questions and allowing students fewer chances of showing their own thinking and understanding of the subject matter. This is exhibited even by teachers whose students initiate more questions. Teachers give all correct answers rather than give students a chance to try out their own questions.

Future research needs to investigate the effects of these interactions on student achievement. If teacher-talk is so predominant despite the dislike for it by some teachers, we need to know what role it serves to the teachers and the students in the teaching/learning process? We will need to understand more fully the factors that lead to the dominance of teacher-talk. Research will also need to uncover whether students do learn, understand and remain attentive by shouting back correct answers to the teacher or helping the teacher finish off sentences. For teachers who aspire for teaching conditions which allow for group work, discussions, and minimal teacher involvement, we need to first understand the cognitive role played by such methods. If classroom-based research shows that there are cognitive gains from these methods, we need to identify policy options that need to be employed to create a space for suitable practices and rules of socialization in South African education. In addition to getting more at the teacher's understandings of meanings of interactions, future studies will need to

get the students' perspective of these current practices and the effects thereof on their learning.

As the education system in South Africa shifts towards a more just and equal system, education policy focus will shift from issues of educational structure, access and provision to quality and effectiveness. The questions addressing what happens in the classrooms will be more relevant towards achieving effective teaching and learning for all students. We need not use the production-function models as research in other Third World countries, including southern Africa, has shown that an increase in instructional inputs improves students achievements (Heyneman and Jamison, 1980; Fuller 1987). Our own experience of poor pass rates in black education as opposed to students of other races has shown this. We need to back-up our research and policy initiatives⁸ for a future education system with a better understanding of the classrooms in which policies will be implemented. Our knowledge of interactions and rules of socialization encouraged in South African classrooms, and the meanings attached to these by both teachers and students, will inform policy options towards an equal, fair and quality educational system for all South African children.

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ENDNOTES

1. Of the 17 education departments in South Africa, the Department of Education and Training (DET) is responsible for policy, financing and management of all black schools in urban and rural areas outside homeland areas. Very few schools are financed by churches, communities, the private sector and international agencies.
2. Since the late 1980's some schools in Soweto and other townships have been disturbed by the political uprisings. As a result, teaching and learning in these schools is not considered to be functional.
3. All schools in the study have double-storey structures. The building of 2-storey complexes in black township schools by the DET was one of the piecemeal reforms after the 1976 student boycotts of 1976. The laboratories and libraries in schools do not have adequate equipment or books. Schools in rural areas have little or no such buildings.
4. Seventeen (17) teachers in this study had a standard 10 and a three year teacher college diploma while 5 had a university degree in addition to some form of teacher qualification. This sample is atypical of black teacher qualifications. Statistics show that while nearly all Indian and white teachers meet the official qualifications (i.e. a standard 10 plus 3 years of appropriate training), only 37% of African teachers met this minimum level in 1990 (see EduSource, No.4, December, 1994).
5. Dehydration in this lesson was described as the removal of water particles from sugar by an acid. The teacher illustrated this by pouring an acid in a glass beaker containing sugar. Once water was removed from the sugar, a huge, banana-shaped charcoal structure remained. This she said was indicating that the chemical reaction resulted in the loss of water from the sugar.
6. Several studies have confirmed the impact of political violence on schooling. The youth suffer the effects of political violence either as victims or through the closure of schools. These result psychological disturbances, lack of motivation and interest in schooling and infrequent school attendance. (see Everatt and Orkin (1992); Nzimande and Thusi, (1992).
7. The recent policy initiative include the National Education Policy Initiative (NEPI) (1993) commissioned by the National Education Coordinating Committee (NECC); the Education Renewal Strategy (ERS) by the government (1992) and the African National Congress (ANC) policy framework for education and training (1994). The main focus on these reports is on areas such as changes on the structure of the education system, democratic participation, equal provision of human and financial resources across all races.

SCHOOL EFFECTIVENESS IN SOUTH AFRICA:

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SCHOOL EFFECTIVENESS IN SOUTH AFRICA

Our aim in this paper is to review debates on school effectiveness and to locate it in the particular historical context of South Africa. The review incorporates the perceptions of four schools on the issue of school effectiveness. We do not claim that the cases we cite are necessarily generalisable to all South African schools and in this sense the research on which this paper is based is exploratory in the main. We do maintain, however, that the perceived experiences documented in this paper offer us valuable insights into the micro, local level realities of schools which are consciously and continuously working towards improvements of their educational practices. We also hope that the analysis we offer will shed light on the problems of formulation and implementation of macro educational policies.

In November 1992, a conference on effective schools in South Africa was held at the University of Witwatersrand, Johannesburg, drawing primarily on black schools in the PWV area. This conference was a collaborative venture between some members of the Education Department of the University of the Witwatersrand and ABEL (Advancing Basic Education and Literacy), an education consultancy based in Johannesburg. Four black schools, which operate in very different contexts, presented what they considered to be effective school practices. The presenting schools were selected on the basis of being regarded as "good" schools by the communities within which they were located.

The disruption of black schooling in South Africa has been on the increase since the early 1980s. By 1985, when the State of Emergency was declared, black schooling in particular regions came to a halt.¹ In 1989, the National Education Co-ordinating

¹ See Molteno, F: "Students Take Control: the 1980 Boycott of Coloured Education in the Cape Peninsula" in British Journal of Sociology of Education, 8 (1), 1987; Bundy, C: "South Africa on the Switchback" in New Society, January 03, 1986; Bundy, C: "Schools and Revolution" in New Society, January 10, 1986; and,

Committee (NECC), a body representative of mainly black education-based organisations, reported the crisis in black schools as characterised by mass expulsion of students, "decay in authority" in the school frustrated by ongoing politically motivated acts of violence, corruption within educational bureaucracies and the mismanagement of examinations and examination results.² By 1992, the situation did not improve. The Secretariat Report at the 6th Annual NECC National Conference stated:

It is unfortunate that the elements of this crisis that were discussed in the 1990 conference are still with us today ... general discontent among students and teachers have also reached breaking point. It suffices to say that the morale of the teachers, but particularly students, at secondary school level is reaching an all-time low.³

In the light of this crisis, the four presenting schools were further selected on the basis of having been able to maintain some level of schooling despite the crisis-ridden nature of the contexts within which they are located. Participants at the conference included staff members from black state schools, independent or private schools, non-governmental education specific organisations, parents, university academics and other educationists.

Guidelines offered to presenters emphasised basic statistical details like numbers of teachers and students, availability of facilities and socio-economic and political environment within

Wolpe, H and Unterhalter, E (eds): Apartheid Education and Popular Struggles, Ravan Press, Johannesburg, 1990.

² NECC National Conference Report and Resolutions 15-17 December, 1989, Sached, Johannesburg, 1990, pp 57-59.

³ Maseko, J: Secretariat Report, 6th Annual NECC National Conference, 11-13 December 1992, Maskew Miller Longman, Cape Town, 1992, p 4.

which the school was located. The guidelines also demarcated seven aspects of schooling that presenters could choose to comment on. These included internal school management, district/area school management, resources and facilities, teachers, students, pedagogy and school-community relations. At the same time, presenters were encouraged to construct their reports in the ways they saw fit and which was most reflective of their situation and experiences. The conference provided a way to focus on what, how and why some black schools were able to achieve, to excel under very trying and deprived conditions. This also served to dispel the myth that because black schools have been historically disadvantaged by the inequities of apartheid and are fraught with so many problems, there are no instances of effective school practices in any black school.

The first section of the paper provides ethnographic details drawn from the conference proceedings. We describe the reported experiences of the different schools in relation to issues such as administration and control, school governance, discipline, motivation of students and teachers, community relations, etc. We then review a selected body of literature on school effectiveness in the light of South African experiences. Our analysis emphasises the need to problematise the approach to school effectiveness in order to capture the specific, diverse and inconsistent ways in which schools operate, and, the contradictory ways in which school actors engage with practices of school improvement. In the light of these observations, in the third section we attempt to provide a theoretical perspective which explains the complex contradictory context in which schools operate and its significance for the question of efficiency. In the last section of the paper, in an attempt to provide possible ways forward, we argue for a theoretical shift away from the depiction of school quality in absolutist terms implicit in the general approaches to school effectiveness. The significance of such a shift is that it allows for inconsistencies, contradictions and imperfections inherent within the life of schools to come under the focus of research work in this area.

In general, the delimited research emphasis on uniformity and homogeneity across schools leads to generalised, macro formulations and technicist solutions that assume schools are rationally organised systems and that their experienced problems may be remedied predominantly by monetarist interventions. Such an emphasis, we argue, oversimplifies the processes of schooling and loses the complex, dynamic and complex ways in which schools acquire and change their particular textures.

Portraits of Four South African Schools:⁴

The proceedings of the conference suggests that the issue of "school effectiveness" was responded to in very diverse ways by the different schools irrespective of some similarities of the socio-economic context within which they operate. Of the four schools that presented, three were secondary schools and one was a primary school. Two secondary schools were located in Soweto, a suburban black township in Johannesburg and are government schools. One of which, School B, was located in fairly middle class surroundings, the other, School D, being immersed in a sub-economic environment. School A, another secondary school, is an independent, private school located in the heart of the Johannesburg city centre. The only primary school presenter, School C, a suburban school located on the East Rand, is self-defined as a community school.⁵

⁴ The data in this section are drawn from the proceedings of the conference. Carrim, N (ed): Effective Schools in South Africa: Conference Proceedings, University of the Witwatersrand, Johannesburg, 1993.

⁵ The school is registered with the Department of Education and Training, the black educational authority. It was established on the basis of private sectors funds. The reason why they define it as a community school is because the initiative to establish the school and the daily management of the school is mainly in the control of members of the school community.

SCHOOL A:

School A is a private school located in the Johannesburg city centre and was recently (1986) established. Having begun as a voluntary service in a garage in Pimville, Soweto, the school now caters for three hundred students and has been formally institutionalised.

We first occupied a warehouse in Selby (Johannesburg) for five years ... currently we are occupying a factory floor in Jeppe Town (also in Johannesburg) ... We have 14 classrooms. Here the facilities are better than what was.⁶

School A has a matric pass rate of 60% and a teacher:pupil ratio of 1:25. All the teachers are qualified, some with postgraduate education degrees. The school is "community based, managed and initiated", with a Parents, Teachers and Students Association (PTSA) being the prime decision-making body of the school. The principal and administrator of the school are ipso facto members of the PTSA, to which they are accountable. Management and financial problems, grievances among students and teachers and issues of curricula development are referred to the PTSA and all policy decisions are made by it:

I am the principal of the school but when it comes to critical decisions, the parents themselves, who our students are responsible to, make those decisions.⁷

The PTSA organisationally captures democratic and participatory forms of school management and facilitates continuous interaction among representative actors of the school - administrators, parents, teachers and students. It also draws the parent community closer to the school by not only being accountable to it but by according it with the responsibility of maintaining the

⁶ Proceedings: 1993.

⁷ Proceedings: 1993.

smooth operation of the school; the most important of which being the resolution of disputes among school actors. For School A, this form of management enabled them to define school "discipline" in contractually binding ways:

We don't see students learning without discipline ... To us discipline is defined in this way: we meet each other half way and that is an agreement between parents, teachers and students. If the agreement is broken, parents, because they are our community, our constituents, are called to rectify and reinstate the agreement. ⁸

Ensuring democratic participation was also the way in which teachers are dealt with within the school. Teachers are respected as professionals and given a fair amount of autonomy - "it is high time our teachers be regarded as professionals". Yet, the school is not oblivious of problems related to what may be termed as "bad teaching". On this note teachers' cooperation is seen as a condition for the educational process:

We don't say you are a bad teacher. We sit down with you and talk to you and see how we can improve your performance. Here we rely on your cooperation. If you do not cooperate, and it happens regularly, then we will ask you to leave. ⁹

At the same time, the school straddles across wanting to democratise school relations and maintaining standards of academic achievement and discipline. These standards are defined by the school community and the external examinations boards to which the school subscribes in order to certificate its matriculation graduates.

⁸ Proceedings: 1993.

⁹ Proceedings: 1993.

SCHOOL B:

In the light of the historical disadvantage of black education in South Africa it is tempting to homogenise the experiences of all black schools in South Africa, especially when one contrasts them to white schools. However, as this investigation will illustrate, School B experiences problems specific to the context in which it operates, and, engages in very different practices. The relatively affluent surroundings within which School B is located, is seen to be significant in establishing the particular ethos of the school:

I come from a school which is situated in Soweto (black township on the periphery of Johannesburg). The area in which the school is located is newly built, and has got quite a number of professionals ... that seems to be a motivation for the students because most of them realise what they can become, because of their parents ...

The school consists of more than 1 000 pupils. The teaching body comprised of 40 teachers. The principal is assisted by a Deputy Principal, Heads of Departments and a Coordinator for each standard. Like school A, School B attempts to establish adherence to practices of school authority by increasing the democratic participation of all the actors of the school through structures such as the PTSA and the SAC (Student Representative Council):

We have a PTSA. The students bring their problems to the teachers, and the teachers take them to their parents... We also have an SAC. The SAC consists on student representatives. In other words in each class there is a student representative, who has been elected by the students, for the students, and this constitutes the SAC. So if any problems arise they are generally dealt with by the SAC, or the teachers, or the PTSA.

At the same time the major problem which School B contends with

is drug and alcohol abuse. This drives the school into using strict physical methods of discipline:

I might as well mention that we have a big problem with Dagga (Marijuana). It is a big problem, it is a bigger problem than alcohol. I don't know where they get it. We don't have drug pushers as such, but we do have students who carry it. So we get landed with a discipline problem. We take them to the office and punish them. We still believe in punishing students. Now, punishing students is taken in different forms. We can use a cane, if the case warrants that, or we can punish the child by suspending him/her. We talk to the parents as well as the child.¹⁰

Physical forms of discipline are coupled with meritocratic forms of regular assessment of student performances. Monthly tests are regularly administered, the marks of which go towards the student's year mark. These tests also serve the purpose of streaming students within the school during the year. School B has a matric pass rate of 50%.

Although school B attempts to enforce tight control and discipline it is forced to tread very carefully. The educational struggles in black education in South Africa has empowered students, in particular, to an extent where it is not possible for school authorities to ignore the responses of students to anything they decide upon. These responses may be boycott or stayaway types of action, protest demonstrations, marches and more militant forms of actions. At times this form of political power reaches level which constrains teacher's authority:

As you know things in Soweto are very different. We have to exercise caution all the time, even with students. For instance if you ask for homework and the student does not give it to you, you punish him and sadly he says 'I know

¹⁰ Proceedings: 1993.

where you stay'. So, you have to really exercise caution."¹¹

Discipline which attempts to ensure that students are progressing through the school system by doing what is deemed necessary hinges centrally on the role of the teacher. School B, however, does not necessarily have the support of all of its teachers. On teachers, School B pointed out,

We have teachers who are motivated and those who are not motivated. Those that are not motivated don't want to be controlled and feel that they are independent. Some teachers want to stay in the staffroom and not go to the class, but we plod along and try to get discipline.¹²

If a teacher is found to be problematic, then the teacher is first called to the principal's office, where s/he is admonished. If the problem still persists, the matter is then referred to the PTSA.

In addition, school B also contends with problems related to ongoing political acts of resistance within the general struggle against apartheid and politically motivated acts of violence in ascendancy since the processes of negotiation have begun in South Africa. If violence is affecting a part of Soweto from which School B students come, then School B would be affected, even if its immediate surroundings are not affected by the violence. The problems experienced by students outside of the school filters into the school and becomes a problem with which the school has to deal. These factors lead to disruption in regular schooling:

We also have problems like any other school ... I think that you are all aware that in Soweto we have a lot of disruptions. I would say that out of 199 days, we manage to teach, that is in Soweto, 100 days, which makes things

¹¹ Proceedings: 1993.

¹² Proceedings: 1993.

SECTION C

BEYOND EFFECTIVE SCHOOLS: AN ALTERNATIVE AGENDA FOR DEVELOPING COUNTRIES

The thesis of this study is simple: studies of effectiveness and studies on quality represent competing and incompatible agendas for school and classroom-based research. Writings which seek reconciliation among these two research approaches (paradigms?) ignore the fact that the concepts have their origins and root their assumptions in radically different understandings of what constitutes good (or poor) educational practice (Adams 1993). The following table demonstrates fundamental differences between these two approaches:

SCHOOL EFFECTIVENESS	SCHOOL QUALITY
1. Origins in economics, using the production function model	1. Influenced (in part) by anthropology, using descriptive procedures
2. Studies the effects of a set of <u>inputs</u> (e.g, textbooks) on a specified output (e.g., student achievement)	2. Studies school and classroom-level processes and their interactions, and the impact on achievement
3. Utilises large-scale statistical methods e.g., multiple regression models to "determine" the relative effects of different inputs on achievement	3. Uses ethnographic instruments, adapted for particular contexts e.g., interviews, observation schedules, questionnaires etc.
4. Results are often aggregated for a large number of schools offering generalizations across contexts	4. Results are often specified for particular schools or classrooms, though generalizations are also sought across schools and classroom

the fact that the Colleges seem to have been largely ignored in the plethora of new initiatives, and yet they should be our first priority in any upgrading strategy.

The main recommendations are summarised as follows:

7.1

Colleges of Education should have laboratories which are adequately equipped to produce competent teachers, and which could also be made available for in-service teacher training. At present, this is not the case for the majority.

7.2

Procurement and maintenance strategies should be introduced which give autonomy to the Colleges and at the same time a needs-based allocation policy should be adopted to remove disparities. Issues such as storage and the provision of laboratory assistance must be addressed.

7.3

Teacher competencies in relations to the provision of practical work courses require both the upgrading of the trainers themselves and a review of the College curriculum and assessment policies that support a 'practical' emphasis. These issues are discussed in some detail as the writers are clearly anxious that any new curricula actively address the problems rather than either ignore or avoid them.

7.4

The Colleges of Education should embrace the improvisation approach and alternative teaching strategies should be built into the training programme. However, the policy of alternatives related to low-cost equipment needs to be adopted by the education sector as a whole. The rationale for this is discussed here and also debated in Chapter 5. It is not an academic debate but is quite central to a common vision for the future.

TEACHING IN SOUTH AFRICA:
OBSERVED PEDAGOGICAL PRACTICES
AND
TEACHER'S OWN MEANINGS

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TEACHING IN SOUTH AFRICA: OBSERVED PEDAGOGICAL PRACTICES AND TEACHER'S OWN MEANINGS

ABSTRACT

This paper reports descriptive data on student-teacher interactions observed in 22 classrooms in Soweto, South Africa. Teacher interviews were conducted to understand the teacher's own meanings of these interactions. Common patterns and between-teacher variation were observed across the classrooms. The most prevalent teacher activities were lecturing at and asking questions of students. Student actions involved responses to teachers' questions in chorus and simple answers. Interviews with teachers showed that teachers preferred students to participate in certain actions although their observed pedagogical practices did not consistently invite such participation. Implications for school reform in post-apartheid South Africa are discussed.

INTRODUCTION

Research on school effectiveness intensified in the Third World countries during the 1980's. This research has largely focused on achievement effects of instructional inputs delivered to schools (for review see Fuller, 1987; Cohn and Rossmiller, 1987; Heyneman and Jamison, 1980). This research has made available massive data indicating material inputs which are effective in improving student achievement in Third World countries. The types of material inputs studied typically include improved teacher qualifications, English proficiency of teachers, supply of textbooks and science laboratories and increases in the number of classrooms. The effects of these inputs are typically measured using end-of-year examination results or tests administered to measure learning outcomes. This line of research can be viewed as a response to the well-known 1966 Coleman Report in the United States which argued that school factors often are eclipsed by family determinants of achievement (Hanushek, 1989). In short, Western researchers were prompted to assess the validity of

Coleman's thesis within first and Third World settings by demonstrating that supply of instructional inputs makes a difference in the achievement of students.

This line of research is based on the production-function model with the underlying assumption that once materials are supplied to classrooms and schools, teachers would magically improve student achievement. This assumption, unfortunately neglects furthering our understanding of what happens in the classrooms once instructional material are in place. The classroom is perceived as a factory where students' learning outcomes are the output of the production line. Little is done to investigate how teachers and students use materials and how social rules and forms of participation affect the use of these inputs. The contexts within which materials is rarely understood nor investigated.

By the early 1980's, many researchers in the West had abandoned the production-function model of studying school effects. These researchers brought more understanding of how the forms of classroom socialization and teaching practices impact on achievement effects of students in the First World (for reviews see Anderson and Burns, 1989; Scheerens, 1992). Goodlad's study of 1016 classrooms in five states in the United States shows that more than half of the teachers use conventional methods, such as lecturing and recitation (Goodlad, 1984). A study by Cuban (1984) shows that even teachers whose schools had introduced reforms in teaching still used methods which centred around the teacher. Classroom socialization differed for students of different racial and economic backgrounds. Teachers studied in American urban schools encouraged more complex and challenging questions and tasks for students of higher socio-economic backgrounds compared to students of impoverished backgrounds (Carew and Lightfoot, 1979).

A shift in paradigm is gradually emerging in Africa and other developing countries in how school effectiveness is viewed. In the late 1980's and 1990's, researchers in the Third World are beginning to focus on the contexts and practices that take place in classrooms rather than simply on inputs and outputs in education (Anderson, 1987; Snyder, Jr. and Ramatsui, 1990). From these studies, we are learning more about the classroom contexts and teaching and learning interactions which occur in classrooms in Third World countries. Recent research includes a cross-national study by Anderson (1987) on the environments of 284 classrooms in nine countries; three of these countries were from the developing world. Anderson found that teachers spent more of the time talking "at" or "with" the students and engaged in administrative activities such as checking attendance registers, distributing and collecting papers. Students, in turn spent time working in assignments at their desks or laboratory tables (Anderson, 1987).

A year-long national study which included ethnographic methods was conducted in Botswana recently (Snyder and Ramatsui, 1990). This study was carried out two years after the Botswana government attempted to introduce innovative teaching techniques and instructional materials such as laboratory equipment, science and English work-sheets. The study showed that dominant teaching practices continued to be lecturing and recitation methods (Prophet and Rowell, 1991; Fuller and Snyder, 1991). Some variations occurred in these interactions. Research focusing on practices and interactions in classrooms is still on a small-scale in South Africa. The South African political context of education has constrained research based on schools and classrooms (Chisholm, 1992). As a result, abundant and excellent educational research focuses more on macro-level policy issues and least on schools (for example see Nkomo, 1992; Hartshorne, 1992; Walker, 1993). Our educational research informs us less

about teaching practices and behavioural profiles that exist in classrooms. We also know very little about the teacher's own meanings which they assign to their pedagogical practices. The education system in South Africa, like all forms of social services, is in transition. The knowledge of what happens in classrooms and meanings that teachers attach to their practices and social rules they encourage will be crucial for the successful implementation of the new policy initiatives aimed at improving the quality of education. Some studies have been undertaken recently (see cited examples in Walker, 1993) and discussions over school effectiveness are starting to take place (Jansen, 1992). Given this trend of research in southern Africa and the paucity of classroom-based research in South Africa, the present article provides initial descriptive data on classrooms. This paper focuses on three aspects. It describes specific teaching practices; the social rules and forms of interactions in classrooms; and the teacher's own meanings of their pedagogical practices.

I begin with giving a brief background of the 22 classrooms. It will then report on the quantitative classroom observations and the qualitative interview data collected. After reporting these descriptive data, I will discuss how the detailed descriptions of classrooms enlighten us about key social rules and pedagogy observed in the classrooms. Finally the views of teachers about their teaching practices are discussed in order to shed more light on the patterns and variations observed in teacher and pupil behaviour. In the discussion, I draw implications for how macro-policy school reforms in the new education system in South Africa might more directly improve classrooms.

SCHOOL AND CLASSROOM BACKGROUND

The study was conducted in Soweto (South Western Townships), the biggest urban black township situated 25 km south of Johannesburg. The population in Soweto is 2.5 million with youth under 21 years of age comprising about 60 % of the population (Everatt and Orkin, 1992). Approximately 90% of which are state administered under the Department of Education and Training (DET), an education department responsible for all black urban township schools¹. Six schools were selected randomly among schools which were considered to be functional². Five of the six secondary schools in the case study are administered by the DET and one is partly funded by the church and by the DET. Five principals were black males and one was a white female.

All six schools³ in the sample have staff room, laboratories and libraries. Classrooms in all six schools have chalk-boards and notice boards at the back. The grade levels ranged from standard six to nine (that is, grade 8 to 11). The desks or sometimes the student tables are lined in conventional rows facing the front. Very few educational charts were posted on the walls. Posters with black South African political leaders such as Nelson Mandela, Walter Sisulu and the African National Congress (ANC) were imposing on the walls. Other charts included the African American rap music groups such as Sister Soldier and Public Enemy. This tells us more about the politicized context in which education takes place in South Africa.

Of the twenty two teachers in the study, 10 teachers were female and 12 male. All the teachers had some kind of teacher qualification either obtained at the teacher training college or at a university after completion of the matriculation⁵. Teaching subjects in the sample were African languages, English, Mathematics, Science, Biology and History. Some teachers are teaching more than one subject. In this study, 7 of the teachers were teaching mathematics, 4 biology, 5 English respectively, 3 taught science, two taught a home language and one taught history. No attempt was made to differentiate the observed classroom interactions according to subject matter.

CLASSROOM OBSERVATIONS AND TEACHER INTERVIEWS

The study was conducted with two purposes in mind. First to obtain descriptive data on common patterns of and variations in classroom interaction and forms of social behaviour in the classroom. This purpose was met through conducting systematic and detailed observations. Second, the study sought to better understand the meaning that teachers attach to their own pedagogical practices. To achieve this, interviews were conducted with all the teachers.

Two sets of observation instruments were used in this study. The observation instrument adopted from Stallings (1978) and later used in Botswana (Fuller and Snyder, 1991) was modified for the purpose of this study. This observation instrument yielded data on the following interactions:

1. frequency with which available basic instructional material were used.
2. the forms and frequency of teacher-pupil interactions.
3. cognitive demands placed on the students by teachers.
4. how teachers used overall class time.

Before I give a lay-out of observation instruments, the following section defines concepts which were used to define teacher and student behaviour in the observation instrument.

Definition of concepts

Basic instructional material:

The basic instructional material in this paper refers to classroom material such as the chalk-board, textbooks, exercise books, charts or other laboratory material which were used during the lesson.

Teacher-pupil interactions/socialization:

This concept refers to the observed interactions that occurred during the lesson. Actions such as types of communication between the teacher and the students such as lecturing, asking of questions, answers to teacher's questions, or request of students to recite material. Activities by students such whether students participated freely and initiated their own questions or lessons where students were observed sitting quietly and listening to the teacher most of the time assumed a type of socialization of students by the teacher.

Level of cognitive demand:

This refers to the level and type of participation that the teacher encouraged on the students. For instance, lower cognitive demand would mean that students were not encouraged to initiate their questions. If questions were asked by the teacher, they required students to simply give an answer and not show their thinking or understanding of the material.

Observation Instrument I

The first observation instrument contained four segments to be completed consecutively by the researcher. In the first three segments, the researcher simply checked in "Yes" or "No" for when the action was observed or not.

Segment 1: During the first five minutes of Segment 1 the researcher recorded basic classroom information such as the sitting arrangements of pupils, class size, distribution of visible instructional materials and the lesson starting time.

Segment 2: Was 8 minutes long and involved a checklist of activities by the teacher and the students using basic instructional materials. The segment and subsequent ones were two-dimensional. This segment contained a matrix defined by the type of action and the type of instructional material used with this action. For instance, in segment 2, number 1:1, the researcher checked "Yes" if the teacher was lecturing using the chalkboard while students listened quietly. This allowed for the study of materials which are mobilized by the teacher and forms of socialization interaction that accompany them.

Segment 3: also 8 minutes long, focused on the type and frequency of communication and socialization between the teacher and students. The researcher was able to indicate if communication was between the teacher and an individual student or with the whole class. Student-student interactions also were checked in this section.

Segment 4: The fourth segment involved estimated how the teachers used class time during the entire lesson.

Observation Instrument II

The second observation instruments was adopted from the Johns Hopkins classroom observation study. In this observation instrument, the researcher records in detail all actions of teachers and students. The researcher also checks additional instructional materials which are not explicitly listed and describes how they are used during the lesson. Audio-tapes also were used to capture classroom conversations to supplement on the detailed descriptions.

Teacher Interviews

The aim of the teacher interviews was to understand the meanings that teachers attach to certain interactions and practices in their classrooms. Questions focused on the teacher's understanding of a "good lesson" and the teaching practices which they prefer using in their teaching.

standard operating procedures" ⁴³.

Furthermore, Bureaucratic accountability is based on the assumption that the educational goals of the school are unifiable and can be agreed upon by the different educational actors. Darling-Hammond's analysis of accountability shows that this is far from the experienced reality of the school. The complex social context of the school gives rise to conflictual set of goals, one such is the need to impart educational as well as political skills to the students (i.e to prepare the student for further education and for future employment as well as to inculcate common culture and basic democratic values)⁴⁴. This set of goals rests on conflictual procedures and educational assumptions. Whereas the notion of educational skill relies on meritocratic procedures of assessment and on an the unequal relation between the teacher's knowledge and the student's knowledge, the notion of political skill is sensitive to the social and political nature of education and requires that education for democratic participation will be based on a democratic form of school organisation ⁴⁵.

One way in which this conflict is manifested in the ethnographic data is in the way school B struggles, on the one hand, to maintain close links with national and community-based organisations in order to expose the students to political education on issues of inequality and exploitation, and to establish democratic structures of decision-making in the school. Yet, and on the other hand, school B adopts hierarchical bureaucratic procedures of authority and teachers' surveillance in order to ensure students' discipline and teachers' cooperation.

Another elucidating concept for the explanation of the of the

⁴³ Ibid, p 64.

⁴⁴ see Ibid, p 65.

⁴⁵ Morrow, W: op.cit, 1989.

above conflict is "democratic professionalism"⁴⁶. The notion of democratic professionalism "authorises teachers, at the same time that it obligates them to uphold the principle of nonrepression, for example, by cultivating in future citizens the capacity for critical reflection on their culture"⁴⁷. At the same time it opposes the "prescriptive nature"⁴⁸ of Bureaucratic accountability and reveals its conflict with Public accountability in the sense that it "obligates public officials to create the working conditions that make possible the exercise of democratic professionalism"⁴⁹.

In South Africa this tension is exacerbated by the crisis of legitimacy which the education system faces in the light of its Apartheid historical role. In this context the system of Bureaucratic accountability is brought to a virtual standstill. This is done on two counts. First: there is an explicit rejection historically of the kind of citizenry the apartheid controls attempted to foster among black South Africans, which disenfranchises blacks in white South Africa and delimits their citizenship rights to bantustans. Second: linked to the rejection of the political and ideological intentions of apartheid, internal educational forms of inspection and supervisions are seen to reinforce apartheid controls, and thus, also rejected. Since 1990 no inspectors are allowed into the black government schools and teachers refuse to be evaluated and monitored.

At the same time as Gutmann argues one must not confuse non-repression with popularity and consensus⁵⁰. Morrow makes a similar distinction between "a policy which is popular and one

⁴⁶ Gutmann, A: Democratic Education, Princeton University Press, New Jersey, 1987.

⁴⁷ Ibid, p 16.

⁴⁸ Darling-Hammond, op.cit, p 66.

⁴⁹ Gutmann, op. cit, p 16.

⁵⁰ Ibid, p 17.

which is rationally justifiable, between mere consensus and rational assent..."⁵¹. According to Darling-Hammond although teachers as professionals are obligated "to do what ever is best for the client" this does not mean that they are obligated to do "what is easiest, more expedient, or even what the client himself or herself might want" ⁵².

In sum, then, school processes are inherently inconsistent and contend with contradictory aims and principles. These inconsistencies arise out of the tensions which structure the relationship between Bureaucratic and Professional on the one hand, and, Public and Client accountability on the other, and the simultaneous pulls among all of them . In mediating these intersecting forms of accountability the school is caught within tensions between meeting educational skills development, which tend toward emphases on expertise and authority, as well as socio-political skills needed for effective citizenry, which emphasise aims of democratic participation and the rights of individuals. Such conflicting demands are worked out differently within specific schools and indicate the impossibility of simply homogenising all schools as rationalisable objects of effective reform.

Possible Ways Forward:

In this section we will review two studies in the field of school effectiveness that attempt to move away from the macro-production based approach dominant in the literature. The significance of the first investigation by Goodlad (1984) lies in its critique of a technicist approach which assumes that school improvements rest solely on "bringing in innovations from

⁵¹ Morrow, op. cit, pp 121-122.

⁵² Darling-Hammond, op.cit, p 67.

outside the school"⁵³. Instead, it emphasises the importance of developing the self-reliance capacity of school personnel.

The second study by Sara Lightfoot (1983) warns against a tendency to view school improvement within the "negative tones of social science" which operate with the implicit assumption of an absolutist sense of quality and goodness. The consequences of this assumption is that analyses gear towards "uncovering malignancies rather than health"⁵⁴. Healthy and workable environments are defined as being without contradictions, imperfections and inconsistencies. As a result, the investigation focuses on what "is missing, wrong, or incomplete" and undermines the richness and unevenness of school processes.

In pointing to the history of debates and public concerns about schooling in America, Goodlad (1984) notes that schools were seen as not equipping people with the skills required in the economic sectors and also not developing the appropriate social-political skills students needed to participate in and contribute to the processes of racial integration and political processes. In the 1960s and 1970s public views about schooling in America were marked by disillusionment and lack of belief in the school's ability to "deliver"⁵⁵. Students were lacking in basic skills and did not have an "appreciation for the American heritage" .

The school was projected as being able to resolve such phenomenal tasks of wider social processes. This, however, as Goodlad shows, has led to sowing "the seeds of disillusionment":

It is a grave error to look for results as one might look for an early groundbreaking following the allocation of

⁵³ Goodlad, J I : A Place Called School: Prospects for the Future, McGraw-Hill, New York, 1984, p 274.

⁵⁴ Lightfoot, S L : The Good School, Basic Books Inc, New York, 1983, p 313.

⁵⁵ See the Coleman Report:op.cit,1966

funds to a building or a bridge. But many people did look for quick, visible results nonetheless, and expected that the benefits would be felt before the decade of the 1960s came to an end. And why not? The power is in education and schooling: large outlays of money would unleash it. Imagine the dismay, then, when early reports did not confirm this assumption.⁵⁶

In researching 38 schools, Goodlad noted the socio-economic and political influences on schooling but identified particular processes within schools that hampered their ability to "deliver". The problems identified by Goodlad fall generally under the themes of internal and external efficiency and management and supervision. Goodlad emphasises the interconnectedness of these within the school and the ways in which the perceptions of actors of particular schools' contexts impact on the ways in which such problems are experienced.

Goodlad's system approach leads to treat the school "as a unit for improvement" where each part of the school must be seen as effecting the others:

The agenda for school improvement is formidable. It includes clarification of goals and functions, development of curricula to reflect broad educational commitment, teaching designed to involve students more meaningfully and actively in the learning process, increased opportunities for all students to gain access to knowledge, and much more. Significant improvement will come about not by tackling these problems one by one, but by addressing all or most of them as a system.⁵⁷

At the same time he also believes that a system approach must be coupled with a second perspective which in his terms refers to

⁵⁶ Goodlad: op.cit, p 4.

⁵⁷ Ibid: p 272.

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"caring":

Our schools will get better and have continuing good health only to the degree that a significant proportion of our people, not just parents, care about them.⁵⁸

In the light of his system approach, Goodlad emphasises greater decentralisation and localism which does not preclude the state's centralised responsibilities such as developing curricula, employment of teachers, equity in distribution of resources and providing time and resources for school improvement⁵⁹. In order to facilitate the development of a spirit of caring, Goodlad also recommends that the "separateness of schools" need to be organisationally rearranged and would be achievable with a stronger district school base. This would reinstate the "laboratory school movement" of the 1960s and 1970s, developing "key" schools that would be exemplary and linked to universities, and, provide "instructional leadership"⁶⁰.

In addition this would allow schools with "differences in size, location and perspective" room for some differences in interpretation at the district level and for some variations in schools within a common framework. Schools would in these ways gain a greater sense of "ownership" and, more significantly, become "self-directing" resulting in putting into place mechanisms for "self-renewal".⁶¹

This would mean, for example, that elementary schools would establish nuclear faculties that would oversee and ensure overall

⁵⁸ Ibid: p 32.

⁵⁹ Ibid: pp 273-275.

⁶⁰ Ibid: pp 298-304.

⁶¹ Ibid: pp 276.

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curriculum development and interdepartmental collaboration. On higher school levels, though not exclusively, Goodlad recommends a vertical arrangement of "school houses" which would facilitate more meaningful and longer contact between teachers and students, across standards and teaching subjects.⁶²

Goodlad emphasises strongly that all the above recommendations "are interconnected" ⁶³. The school is viewed as a system and consistent with the perspective of the "school as a unit for improvement", these recommendations are meant to facilitate the overall functioning of the school as a whole, more effective relations among its constitutive parts, as well as fostering the affective dimension of the school actors.

Lightfoot (1983) researched six schools in three different areas: urban, suburban and elite. Her emphasis throughout is on the complexities of context, actors and processes. Unlike Goodlad, she notes the inconsistencies in actions and the diverse ways in which people make meaning of the same things and of issues specific to them. In addition, she pays particular attention to the contradictory relations among constitutive school parts. In addressing these issues she points to an implicit assumption within the literature of school effectiveness, that improvement is a pursuit of perfection, a sense of quality that sees "goodness" in absolutist terms.

The search for "good" schools is elusive and disappointing if by goodness we mean something close to perfection. These portraits of good schools reveal imperfections, uncertainties, and vulnerabilities in each of them. In fact, one could argue that a consciousness about imperfections, and the willingness to admit them and search for their origins and solutions is one of the important

⁶² Ibid: pp 304-312.

⁶³ Ibid: p 318.

ingredients of goodness in schools. ⁶⁴

Methodologically, Lightfoot calls what she does as "portraiture". For her, sketching the portraits of the schools she researched allows for capturing the lived, complex and dynamic realities, expressions, articulations, imperfections, and nuances of textures of the schools. It also captures the passion/s that characterise the school. Like portraits, they also allow for differences to be maintained and reflect a sense of becoming. Quality, she argues, is a process of formation. The portraits fix the development in time but allow for the past to be reflected within it, and the future to assess. More importantly, it embodies a process of self reflection and commentaries from a multiplicity of gazing others.

This would mean primarily that "teacher's autonomy", "school-community relations", "leadership", "student-teacher interactions", etc. must be understood as inherently contradictory and context specific and not a-historical formulations of homogenous and universal processes.

Lightfoot shows how school-community relations differ from one school to another and the ways in which the "boundaries" between school and community constantly shifts and changes in the same school.

Good schools balance the pulls of the connection to community against the contrary forces of separation from it ... [the schools] walk the treacherous 'tightrope' between closed and open doors, between autonomy and symbiosis. ⁶⁵

These "boundaries" are, therefore, "permeable", rather than fixed and constant. In general private schools have more control in defining standards of goodness than their public school

⁶⁴ Lightfoot: op.cit, p 309.

⁶⁵ Ibid: p 322.

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counterparts ⁶⁶. At the same time some private schools had standards "imposed from the outside" by "old boys'" networks bent on maintaining a particular tradition in tact in the school. Other schools were more influenced by the immediate communities's sense of standards which tended to reflect changing values and conditions within wider society. Some schools also warded off influences from the outside in order to guard against "factionalism, divisiveness and violence" within the walls of the school. Institutional control of the school are not a mere set of systemic arrangements or formal procedural regulations. Their nature and legitimacy, their psychological holds on the school actors are shaped within the matrices of codes and standards of these shifting and changing set of boundaries.

It is the principal who

sits on the boundaries between school and community; must negotiate with the superintendent and the school board; must protect teachers from intrusions and harassment; must be the public imagemaker and spokesman of the school.⁶⁷

The view of the principal as a leader does not refer to a single individual positioned above the rest. The "leader" needs the support and acceptance of a staff. Further more the styles of leadership are not homogenous. Even though leadership is projected stereotypically as masculine, the type of masculinity varies from being militarist, coach-like and paternalist. Permutations of combinations of such qualities are manifold and even move to incorporating what are seen stereotypically as feminine, like nurturance and affiliation. Some schools explicitly work within a feminist ethos.

⁶⁶ Ibid: p 316.

⁶⁷ Ibid: p 323.

The complex patterns of articulations which Lightfoot insists on, in her attempt to provide insightful details of school processes, can also be revealed in the different ways in which various schools interpreted the meaning of teacher autonomy. Some articulated teacher autonomy as granting teachers pedagogical freedom, and nurturing their status of professionalism both in terms of material incentives and community perceptions of and attitudes to them. Others saw it as allowing spaces for curricula innovations, collegiate support and further academic development. A different articulation emphasised freedom from administrative duties. This was seen as a way to establish uniformity among teachers in order to streamline administrative tasks thereby making them less demanding and time consuming. In some schools the granting of authority was seen in combination with particular adherences to regulation and acknowledgement of being exemplars of adulthood for students.

Lightfoot's comments on student values shows interestingly the conservatism implicit in adolescent ways despite the projection stereotypically of them as a rebellious and uninhibited. This is reflected in their need for authority structures and regulations which give them a sense of belonging; their attempts to create peer affiliation groups among themselves where they both mimic social conservative mores; and, their positive regard for guidance from teachers. At the same time these inclinations do not always concur with "intellectual play" where student values vacillate from rebelliousness to sheer conservatism.

Although Lightfoot, in general, agrees with the interconnectedness view of school as a unit for improvement, she would object to seeing the system as a process towards absolute rationality and perfection. The partial and inconsistent forms in which schools operate must not be seen as a deficit but rather the very nature of being a school. Improvement would mean to work within the contradictory and incomplete senses of achievements which does not, however, mean lowering of standards:

The search should be for 'good enough' schools - not meant to imply minimal standards of talent and competence, but rather to suggest a view that welcomes change and anticipates imperfection. I would underscore, once again, that I am not arguing for lower standards or reduced quality. I am urging a definition of good schools that sees them whole, changing, and imperfect. It is in articulating and confronting each of these dimensions that one moves closer and closer to the institutional supports of good education.⁶⁸

Both Goodlad and Lightfoot point to the inadequacies of macro approaches of school effectiveness which investigate such issues across schools, rather than within schools as well. The processes within schools are important in understanding the ways in which particular schools respond to and appropriate centralised policy recommendations. Whilst Goodlad tends to view school operations as interconnected functions within the system of the school, Lightfoot points to the complexes of the processes of schooling. Lightfoot's contributions are significant in cautioning us against assuming that mere structural rearrangements and interventions would lead to internal coherence and conflict free interactions within schools. Within this view Lightfoot poignantly calls to question assumptions of "quality" which imply states of near perfection.

Conclusion:

In this paper we have reflected on the reported experiences of four black schools in South Africa. We have done so in order to engage with a selected body of literature on school effectiveness. The approaches suggested in the literature were argued to be monetarist and macro in emphasis, leading to the

⁶⁸ Ibid: p 311.

recommendation of technical solutions that at once project school as systems free of inconsistencies and contradictions and that imply an absolutist sense of quality. In using the ethnographic data provided by Schools A, B, C and D we have argued for the need to research the nuances and differences in contexts; diversities of school actors' perspectives and interests; and, plurality of tensions and conflicts in the social relations of the school. This, we maintain, enables one to capture the intricacies of everyday school realities and the richness of their portraits. We contend that such an approach is necessary within the South African context because of the fragmented nature of the educational system and the vastly different contexts and experiences of schooling for various racial groups in South Africa.

It is clear to us that further research work cast in qualitative approaches would be necessary for further developments of in the field of school effectiveness within the South African context. This would entail the use primarily of ethnographic methods and case studies that would research in depth the precise nature of school interactions, maintaining their various and varying ways in which they cope with imperfections.

In the light of the highly politicised nature of black schooling in South Africa makes it is important that a shift is made from the production-function emphasis in the literature on school effectiveness to democracy-empowerment approach. This will take into account the complex dynamics of macro socio-political processes in micro school contexts.

These suggestions do not undermine the continued use of existing quantitative approaches. In this respect, we assume that educational provisions, like basic facilities, health and educability of children, equitable distribution of educational resources across all racial groups are given. All that is being cautioned here is their partial relevance to South African schooling. Policy-makers would be better equipped with data about

the micro realities within schools in order to understand the issues and concerns of school-based actors that ought to inform macro educational policy formulation and the possibilities for their implementation. Our focus and suggestions, then, are pertinent to a post-apartheid scenario, towards which we are rapidly, albeit with much pain and difficulty, moving.

of punctuality due to travelling long distances reported by school B. The students themselves, at the same time, may have high levels of drug and alcohol abuse or may be traumatised by acts of political violence which " have taken a toll on the children" as reported by schools B and D respectively. In these conditions, student achievement levels may not improve, despite equitable provisions of monetary inputs..

EXTERNAL EFFICIENCY

External efficiency, on the other hand, refers to the "relevance of an education or training programme to subsequent activities of its participants".²⁷ This includes the extent to which students are prepared for either higher education or employment and the extent to which the knowledge taught in the schools meets adequately the skills required outside of the school.

Given the focus on school and external agencies relations, issues that are of concern in the theme of external efficiency include admission rates at higher education or training, employment rates, level of employment, income distribution of graduates, level of community satisfaction in school performance, extent of further on-the-job training and employer attitudes to employee preparation. These issues are measured against the policy of admissions into the schools, relevancy of school curriculum content, instructional effectiveness, staff development and supervision and student discipline.²⁸

The conference reports of schools B, C and D points out to the importance of extending the theme of external efficiency to include sectors other than higher education and the economy in

²⁷ Pigozzi and Cieutat: op.cit, p. 61, 1988.

²⁸ Adams and Boediono: op.cit, 1992; Lockheed and Verspoor: op.cit, 1990; Windham: op.cit, 1990; and, Pigozzi and Cieutat: op.cit, 1988.

conceptions of wider society. School B tied the efficiency of the school to student access to COSATU - Congress of South Africa Trade Unions. School C enunciated relations with "democratic structures of the oppressed" and "being sensitive to their views" as principles of school management crucial to the efficiency of this school. School D was striking relations with psychological services units to assist traumatised students in the school. Thus, the external agencies these schools related to and the ways in which they assessed the preparedness of their students extend external efficiency to include accountability to and participation of political organisations, trade unions and service organisations. These links have developed through the influence of broader political and social struggles and continue to play an important role in ensuring teaching-learning in black South African schools. In the particular historical contexts within which these schools operate, community satisfaction in school performance and school accountability to organisations in the anti-apartheid alliance entail demands for students empowerment and preparedness for the political realities of a society in transition. These demands ramify into the ways in which these school address the theme of administration and supervision.

ADMINISTRATION AND SUPERVISION

According to Windham (1990) ²⁹ the main problems that school administrations have to deal with are inefficient bureaucratic structures, social and cultural constraints on decision making and lack of appropriate data required for administrators to base their decisions. Adams and Boediono (1992) ³⁰ pay particular attention to effective classroom management, order and discipline. They point to the importance of visible leadership which stays in close touch with the organisational and teaching

²⁹ Windham: op.cit, 1990.

³⁰ Adams and Boediono: op.cit, 1992.

activities of the school as well as sharing responsibility and commitment with the rest of the school actors. General research in this area use technicist methods which emphasise time, that allows empirically quantifiable units of measure.

For example, in response to the question, what needs to be done to improve the role of inspectors ³¹, researchers calculated the amount of time the inspector spent at the school and its frequency.

In the cases of School A and C, where issues of school management - administration and supervision - were related to the ways in which management relations could be democratised and the extent to which this could empower all school actors rather than the amount the time spent in and frequency of such contacts. Windham acknowledges the social and cultural constraints on decision making and Adams and Boediono's incorporate the link between visible authority and democratic participation. Yet, the production-function based approach of the efficiency model prevents a qualitative analysis which investigates the ways in which conflicts and tensions inherent within administration and supervision - captured by School C as "management being a site of struggle" - influence the process of administration and supervision.

School C went as far as enunciating "collective responsibility" and "participatory democracy" as principles of school management. This they saw as necessitated by the aspirations and histories of the communities with which they were dealing. In wanting to ensure that the "masses are empowered", that "affirmative action, particularly with regard to race and gender" in school management structures are addressed in the school, School C is drawn into democratic forms of management. Yet, the school is also bound to ensure that its efficiency is maintained and improved. Due to this pressure, efficiency begins to function as a push for

³¹ Windham, op.cit, 1990.

authority and leads School C to also state "scientific management" as another principle for school management.

School management "as a site of struggle" is, then, constituted by the contradictions in management principles which arise out of the historical background of the school. The school was initiated and established by the informal settlement community. At the same time that authority over knowledge, discipline and management is conceived on the basis of meritocratic principles of expertise, the continued control the wider community and its participation in the affairs of the school is seen as historically necessary.

School B provides us with an interesting case of the ways in which such tensions are experienced on the level of teachers and students. All schools, A, B, C and D had Parent, Teacher and Student Associations (PTSAs) as their organisational forms of school governance. The PTSA, which emerged historically in the anti-apartheid educational struggles during the 1980s, are attempts at opposing the centralist and racist exclusionary mechanisms of state imposed school administrative and supervisory structures. The PTSA is designed to ensure that the clientele which the school serves, has a voice in the affairs of the school ranging from issues of teacher employment, conditions of teachers work, use of corporal punishment in disciplining students, accountability and representativeness of the principal, and financial and policy decisions of the school. This allows for previously disqualified and marginalised actors to become centrally involved in activities from which they were excluded.³²

Notwithstanding the commitment of School B to democratise the process of school management, it still had to resort to "closing the gates" on both teachers and students who are not punctual,

³² Metcalfe, M: Build Your PTSA: A Manual for Organising Parent, Teacher, Student Associations, NECC/Sached Trust, Johannesburg, 1992.

and to "use a cane if the case warrants that, or (to) punish the child by suspending him/her". Moreover, School B had to contend with "some of (the teachers) who are not motivated ... and do not want to be controlled ... (but rather) want to stay in the staffroom and not go to class". Yet, School B also ensures that "COSATU (is allowed) to talk to the kids". In other words, on the one hand, School B imposes authoritarian and autocratic forms of discipline such as "caning" and "closing the gates". On the other hand, School B insists on encouraging students to "make their own decisions".

One of the major problems School B had to confront is the problem of drug and alcohol abuse. The lack of discipline among students was seen to be linked partially to this abuse. Furthermore, the oppressive forms of political violence are worked out by the students in the school in ways which interfere with and question what seems to be basic requirements for an orderly school environment: "If you ask for homework and the student does not give it to you, you punish him and sadly he says, 'I know where you stay'". What this example shows is that the assumption of an orderly environment and the notion of school discipline gain their meanings in historically particular ways in which wider processes of change and struggle, which impinge on the social relations within a specific school. Such inconsistencies and contradictions are important in understanding the precise ways and purposes with which schools get to cope with their realities and where they establish priorities.

Contradictions and Efficiency:

The literature on school effectiveness acknowledges diverse educational aims of acquiring subject knowledge, skills, values and attitudes necessary for the educational context and for future participation in the wider society.³³ Yet the analysis of

³³ Lockheed and Verspoor; op.cit, 1990 and UNESCO. op.cit. 1990.

school effectiveness does not take sufficient cognisance of the conflicts embedded in these aims and their implications for the debate on efficiency. Instead, the literature focuses on the costs effects involved in establishing the structures necessary for rendering the school system and the ensuring that the educational context is functional. The apparent relevance of such an analytic focus is seen in the need to respond to a wide range of policy questions. Yet, as the ethnographic data suggests, different schools experience specific problems and their experiences are characterised by various inconsistencies and tensions. While the quantitative-based model of efficiency can measure, compare and calculate test scores against the background of classroom and teachers ratios and other inputs; can prescribe organisational procedures for an efficient management, what it can not do, however, is to tap into the interests and perceptions of the students, parents and teachers - the main social actors of the educational process. We argue that these specific and conflictual experiences cannot be explained only by reference to the regional location of the school such as urban or rural, developed or developing contexts. Rather, these experiences must be investigated in the light of the political, economic and cultural complex tapestry of meanings that the school, in its particular context, must be responsive to in its attempts to serve the diversified set of interests embedded in the notion of a 'pupil'.

In this regard the macro focus of the literature on school effectiveness leads to tendencies to homogenise schools' experiences and project them as systems that are internally consistent and rationally organised with no contradictions. Such an approach does not account for the nature of the social relations which make the participation in the educational context meaningful. Further more it oversimplifies the nature of educational encounters by analyzing them primarily in their relation to future employment and higher education.

In this section we will examine several arguments which aim to

elucidate and explain the complex contradictory context in which schools operate and its significance for the question of efficiency.

The first explanation lies in the process of accountability.³⁴ The notion of school accountability includes the three-fold aim of setting meaningful educational standards, establishing means to implement these standards, providing avenues of redress in cases these standards are not met. At the same time the institutional forms which operationalise the different aspects of school accountability impose conflicting demands upon the school. For example, the attempts to redress inefficiency through the introduction of effective authority regulating mechanisms, with the view to achieve high educational standards, could be in conflict with the goal of a meaningful pedagogical interaction. This could be illustrated through Wexler's analysis of one of three particular responses to the perceived current (1990) educational crisis in the United States.

The general public perception of this crisis is articulated through the economic needs for competitive marketable products:

The prevailing theme has been that America will lose its global economic advantage if it does not educate its youth for the technological capacities that are required for the new information age of electronic production. The thesis is simply that without more success on a wider scale within education, there will be an inefficient level of human resources necessary for economic competition; therefore, education must be reformed.³⁵

The first way in which this crisis is translated into the school is in the preoccupation with control which is expressed primarily

³⁴ Darling-Hammond, L: "Accountability for Professional Practice, in Teachers College Record, 91 (1), Fall, 1989.

³⁵ Wexler, P: "School is Society", public lecture, Rochester, New York, 1990, p 1.

in the demands for the establishment of effective authority-regulating practices such as disciplinary structures. These are introduced in order to counteract what is seen as the "chaotic" consequences of the era of "permissiveness", commonly experienced as "lack of discipline". The second way in which these public perceptions are propagated is in the attack against the over-spending liberal state, more particularly against its range of compensatory programs. The third response to the crisis of authority is the bureaucratization and technicisation of teachers' work. On the students' side, these forms of redress very efficiently broke down students' collective resistance, but produced, at the same time, what Wexler calls "identities-in-opposition": the image of the student with discipline problems who is also academically a "looser" because his special needs are too expensive ³⁶. Teachers on the other hand have been experiencing excessive control, routinisation of their teaching, occupational stagnation and burnout ³⁷.

The significance of Wexler's investigation is that it shows that the emphasis in the educational reform on effective measures of control, has produced a crisis of the school itself experienced as "educational withdrawal" and "reciprocal relationship of 'not caring'". In a system which selects, brands and eventually extrudes "the losers" from the public school, and whose teachers "withdrawing their energies into ritualised job performance", the reciprocal relationships of education have become relationship of "mutual non-caring". This is a pedagogical crisis where by the necessary conditions for the pedagogical situation i.e "identification, attachment and caring" have been substituted with "an institutional, rationalised, even mechanical" mode of interaction.³⁸ In Darling-Hammond's terms this unintended consequence has developed due to the structural contradictory

³⁶ Ibid, p 6.

³⁷ Ibid, p 8.

³⁸ Ibid, pp 5-11.

relations between the systems of Public and Client accountability³⁹. The former requires forms of standardisation to establish "same treatment" of all clients, whereas the latter is responsive to individual and idiosyncratic needs of different groups of clients.

This structural tension could be used to illustrate a possible scenario of school C's politico-cultural conception of "management as a site of struggle". On the bases of the principles of "affirmative action, particularly with regard to race and women", "participatory democracy" and "empowerment of the masses", the interests, views and perceptions of working class parents and black, women, underqualified teachers need to be actively given a voice and prioritised against the historical privileges of black, professional, male parents and qualified teachers in the higher echelons of the school. The rationale operating in these divisions is political accountability to previously disempowered Client experiences. Yet, on the basis of Public accountability, these decisions may be rendered secondary in the light of pressures to organise the school along "meritocratic" and "scientific" principles to enhance the standardisation level of the school clients to ensure their marketability and appropriateness in the economy. Responding to such pressures would justify hierarchical regulatory mechanisms where particular types of actors, usually male, middle class and with high levels of expertise, would be granted authority and their views and interests would be legitimated.

In general the literature on effective schools does not see a necessary link between levels of teacher qualifications and good teaching⁴⁰. With regard to managerial and decision making capacities, there seems to be convergence in the literature on the idea that this involves specialisation and training. Given

³⁹ Darling-Hammond: op. cit, pp 64-66.

⁴⁰ See for example Windham, op. cit., 1990 and Lockheed and Verspoor: op.cit, 1990.

the concerns of cost-effectiveness, it is more likely that, within broad limits, these skills would be developed in the more qualified sector of the school. This would contradict disadvantaged Client's interests for empowerment and their democratic rights of participation.

These sets of conflicts can be explained, according to Morrow, by reference to the tension between two views of educational rights: the first claims that the right to participate in decision-making is "a natural right of human being". Its main presupposition is that "no one can know better than the person herself what is in her interests". According to this view political judgement is not made outside any social context and in that sense its rationality is context specific, intimated with the particular characteristic of the issue at hand and requires the actual participants of the situation to make the decision. The second view claims that a decision on an issue is based on the understanding of the relation between means and ends, requires personal and social forms of detachment, and that maturity, experience and specialised knowledge, or in other words a certain level of rationality, qualify some and disqualify others in their demand for authority.⁴¹

Another axis of contradiction lies in the relation between Bureaucratic and Professional accountability. The view underlying Bureaucratic accountability is that,

schools are agents of government that can be administered by hierarchical decision making and controls. Policies are made at the top of the system and handed down to administrators, who translate them into rules and procedures. Teachers follow the rules and procedures (class schedules, curricula, textbooks, rules for promotion and assignment of students, etc.), and students are processed

⁴¹ Morrow, W: Chains of Thought, Southern Book Publishers, Johannesburg, 1989, pp 120-125.

according to them.⁴²

From the perspective of effectiveness, the rationale for this hierarchical approach is that in cases when desired outcomes are not produced this means that the rules and procedures are not "sufficiently detailed" and the instructions for implementation are not "sufficiently exact".

Remedies are sought in the following two areas:

The first area is the standardisation of students along the lines of ability so that every student will receive uniform treatment and that their results could be converted into a standardised product.

The second area is the standardisation of school knowledge and of teachers' work. The idea here is to devise educational programmes, teaching procedures and standardised rules of practice in order to ensure that the administration and execution of the relevant educational policies are followed in the classroom.

The emphasis on a "precise specification" does not consider the professional status of the teacher, the historical and political context in which school knowledge is selected and legitimised, the influence of socio economic factors as well as teachers' attitude on student's ability, and the importance of democratic governance and participatory learning for a collaborative and meaningful educational exchange. In the way that Bureaucratic accountability operates these issues are not seen as an integral part of teachers' professional accountability, partly because they cannot be measured or regulated, and as a result "teachers cannot be held accountable for meeting the needs of their students; they can only be held accountable for following

⁴² Darling-Hammond: op.cit, p 63.

very, very difficult. How do we overcome that? We organise morning classes and afternoon classes ... We also have the problem of students coming from different parts of Soweto, so punctuality is a problem. We try to check this by closing the gates. But this doesn't work because we close the children outside and sometimes there is a teacher amongst them. It becomes a problem. We have to change the methods we use from time to time.¹³

Located in the midst of highly politicised environment is not only experienced by the effects of violence but by the rather specific close relations fostered between the school and a leading political organisation:

We are friendly with COSATU (Congress of South African Trade Unions). We allow COSATU to talk to the kids when they want to talk to the kids. We do not restrict them because we feel that students must make their own decisions, because if we don't allow them to make their own decisions, then we have problems.¹⁴

Despite the relatively affluent socio-economic context of School B, this report indicates that School B contends with problems of disruptions caused either by political events in the surrounding Soweto community, and wider South African society, or by drug and alcohol abuse by students. The school is forced to balance the need to establish a working environment in the school, as well as ensuring the democratic political aspirations of the school community are met.

¹³ Proceedings: 1993.

¹⁴ Proceedings: 1993.

SCHOOL C:¹⁵

School C is a primary school located on the East Rand of Johannesburg. It is a newly established school, built within an informal settlement. The school was set up through the initiative of the informal settlement community and has a high level of community involvement in the affairs of the school. Ways of democratising school management and the importance of increased community involvement were the issues emphasised by School C. It caters for 1 000 pupils and has a teaching staff of 33 teachers. The community it serves is multiethnic and multilingual. Six different languages are spoken in the school and the medium of instruction becomes English when pupils reach Std 1.

School C pointed out that through their experiences they were able to decide on twelve principles of school management:

Collective responsibility; meritocracy; empowerment of the masses; participatory democracy; openness; fairness; affirmative action in administrative structures, especially with regard to race and gender; ridding the administration of unnecessary red tape; sub-committees must have clearly formulated duties; be scientific; empathy; and, be sensitive to the views of the democratic structures of the oppressed ... Management of the school along these principles becomes a site of struggle ... allowing people's education to be a lived experience.¹⁶

School management as a "site of struggle", on the one hand, refers to the diversity of interests of differently constituted

¹⁵ The data used to describe the report of School C relies solely on one of the transcripts in their presentation. Due to technical faults with the other transcripts, further data could not be retrieved. Unlike the other school reports, our discussion of School C's presentation here is constructed as an analysis of the relationship between "principles of school management" - the reliable data in this presentation.

¹⁶ Proceedings: 1993.

school actors. Parents' interests do not always collude with those of teachers, neither do teachers' interests always collude with those of students, and so on. At the same time all parents do not hold the same views or interests. Neither do all teachers nor all students hold the same views among themselves. On the other hand, school management also becomes a "site of struggle" because of the tension among management principles. Does not "meritocracy" limit the "democratic participation" of those who do not possess skills and expertise and as such do not have the necessary "merit"? How does one decide what is "unnecessary red tape"? Would "clearly formulated duties" for school functional sub-committees constitute "unnecessary red tape"? One can easily imagine a teacher feeling constrained by such "clearly formulated duties" and thereby experience them as "red tape" and feel controlled rather than "empowered".

Given that School C is a primary school, it has less problems to deal with among the student body. There is no felt need to ensure student participation at primary school level. They are "simply too young". Neither are there problems of drug, alcohol nor other types of abuse plaguing the student body. School C, then, is more in a position to explore issues of school management and do implicitly allude to conflicts and tensions in the processes, actors and context of school management. An exploration of these will be embarked upon later in the paper.

SCHOOL D:

School D is located in a sub-economic area in Soweto and is subjected to really appalling conditions due to poverty, lack of facilities, political violence and vandalism:

Our school looks like a big bomb has hit the place some years ago. There are no doors, no windows and some classes do not have chalkboards. We are in a very difficult situation, but life must go on ... Teaching and learning is

seriously affected by the violence in the community. When the hostel violence (ANC-Inkatha) was going on, there was no teaching and learning going on. When it is winter or raining, the school also has to stop, because there are no windows and doors ... There is no fence around the school and while school is on you would find a car spinning its wheels and causing a lot of dust and a lot of confusion. We would have to wait for this to die down and then return to class ... The turbulence and violence have taken a toll on the children and we are hoping to enlist the services of the psychological services department because the children really need the assistance. I am surprised at the willingness of the staff and students, despite the problems we have.¹⁷

School D has reported the state of the school to the educational authorities and despite an acknowledgement of their appalling conditions, no departmental assistance has as yet been forthcoming.

It has a student population of 1 000 and a teaching staff of 33. Its matric pass rate is declining; from 50% in 1991, the pass rate has dropped to 40% at the end of 1992.

Most of the disruptions arise outside of the school and filters into it. The school also is vandalised often.

Furthermore there is an absence of a fence around the school. As a result of these factors it is difficult to prevent students from going out of the school during and after breaks. One way in which the school tries to cope with these problems is by allocating to teachers responsibility for "blocks of the school". At the same time, the presenter emphasises that "discipline does not appear to be a major problem in the school". Another way in which the school compensates for disruptions is by encouraging students to attend extra-tuition classes in the Johannesburg city

¹⁷ Proceedings: 1993.

centre and other venues in Soweto.

The data provided by this school indicates both the nature of problems it experiences and the ways in which it attempts to overcome them. That it is able to maintain levels of both teaching and learning at this school and have matric graduates passing through it annually is admirable and cannot be emphasised sufficiently.

In summary, although located in Soweto, School D is markedly different from School B. School D is much more affected by violence and contends with a low socio-economic environment and populace. School C is located in a fairly middle class area, has most school facilities and is not affected by violence to the same degree and intensity as School D. The nuances of the differences in contexts is thus not only based geographically, but, more importantly, specific to the socio-economic and political influences impacting on the school and which it contends with specifically and daily.

Schools A, B and C emphasise democratising the management structures and processes of the school. These schools have Parents, Teachers and Students Associations (PTSAs). Increasing school actors participation in the affairs of the school and maintaining discipline in the school are of central importance to all of them.

Schools B and D, both of which are located in Soweto, experience ongoing disruptions of schooling, but, to differing degrees. School D's student population is traumatised by experiences of violence. School B, on the other hand, deals with problems of drug and alcohol abuse among its student body. School D, unlike School B, drastically lacks facilities, such as doors, windows, desks, etc. and deals with low socio-economic surroundings.

On the levels of school management, student and teacher discipline, school-community relations, ways of coping with

problems and backgrounds and relevancy of the political contexts within which schools are located, these schools provide important pointers for the ways in which "school effectiveness" is being viewed by them. They implicitly suggest that their requirements extend beyond mere material provisions of educational resources. We will turn to a fuller discussion of the significance of these views after a consideration of a selected body of international literature on "school effectiveness".

Views of School Effectiveness:

In general terms the approach of school efficiency is based on the production-function model which specifies the maximum feasible outputs that can be obtained from a given set of inputs¹⁸. Pigozzi and Cieutat (1988) define efficiency in the following way:

An education system is efficient to the extent that it makes the best use of its available resources to achieve its stated outcomes. These include financial as well as human and material resources.¹⁹

Efficiency, then, refers to intra-school operations that attempt to ensure, increase and/or improve equity in the sense of maximising the number and quality of more appropriately educated school graduates. Intra-school operations are thus linked to general aims in education such as the acquisition of the

¹⁸ Chetty, D: "School Efficiency and Effectiveness: Pointers for Educational Transformation in South Africa": Economic Aspects of Education Conference, University of Cape Town, 1992; Hunshek, E A: "Educational Production Functions" in Psacharopoulos, G: Economics in Education, Research and Studies, Pergamon Press, 1987.

¹⁹ Pigozzi. M J and Cieutat, V J: Education and Human Resources Sector Assessment Manual, Institute for International Research, New York, 1988; p 5.

necessary subject knowledge, cognitive skills, values and attitudes needed for mastering the educational process and for participation in the wider society. ²⁰

Internal efficiency, external efficiency, and, administration and supervision have been generally found to be most useful analytical themes for organising data, identifying problems areas such as access and equity, quantifying the cost-effects and nature of investments and providing a basis for comparative studies ²¹.

INTERNAL EFFICIENCY

Internal efficiency is used to identify

how effectively a part of the educational system uses available resources to achieve educational outcomes ... (It) may be considered to have two dimensions: a) the relationship of what enters and what exits various parts of the subsector, and b) the relationship of quality to costs between the entry and exit points. ²²

In other words, internal efficiency refers to the ways in which a school, "a subsector", uses its given budget, "input costs", to ensure and increase the level of its student achievements, "output benefits". The focus of internal efficiency is on intra-school issues which are examined as a relationship between the inputs of student:teacher ratios, instructional methods, classroom:teacher ratios and teacher qualifications, and the outputs such as dropout, repetition and graduation rates, and

²⁰ Lockheed, M E and Verspoor, A M: "Improving Primary Education in Developing Countries", World Conference on Education for All, Bangkok, 1990; UNESCO Education for All Conference: Final Report, Jomtien, Thailand, 1990.

²¹ Pigozzi and Cieutat 1988; op.cit, p 60.

²² Ibid; p 63.

outputs. The recommendation is quantitative and economist; it is directly monetarist. This appears to be very consistent ²⁵

Current debates on future educational policies in South Africa are, by their very nature, of a macro focus. They address the question of what are the most cost-effective ways in which the South African educational system as whole may be non-racialised, given the previously segregationist policies of the apartheid regime, the state of the economy as well as the demands made by the anti-apartheid struggle. Most of these debates have begun to emphasise issues of school effectiveness in the ways found in the international literature.²⁶ In this regard building more classrooms is necessary to redress the inequitable distribution of educational resources under apartheid. At the same time, the principle of non-racialism is also made to bear on the extent to which additional monetary investments into education ought to be made as opposed to utilising maximally facilities existing in the under-utilised white educational sector.

However, a problem emerges when the geographical location of such previously white school facilities bring additional difficulties to students who have to travel considerable distances to use such previously under-utilised school facilities. Like the problems

²⁵ Nuttall, D L et al: "Differential School Effectiveness", in ? ,1988; Windham, D: Improving the Efficiency of Educational systems: "Indicators of Educational Effectiveness and Efficiency", State University of New York at Albany, 1990; Lockheed and Verspoor: op.cit., 1990; Adams and Bodieono: op.cit, 1992; Jimenez, E et al : "The Relative Efficiency of Public Schools in Developing Countries", Education and Employment Working Paper, Population and Human Resources Department, World Bank, Washington, 1988; Hunshek: op.cit, 1981; Fuller, B: "Raising School Quality in Developing Countries: What Investments Boost Learning", World Bank Discussion Paper, Report No EDT7, Washington, 1985; Bossert, S T: "Effective Elementary Schools" in Kyler, R M J (ed): Research for Excellence: An Effective Schools Sourcebook, National Institute of Education, Washington, 1985; Schwille et al: op.cit. 1986.

²⁶ NEPI Frameworks Report: National Education Coordinating Committee, Oxford University Press, Cape Town, 1993; Education Renewal Strategy: Department of National Education, Pretoria, 1993; Chetty, D: op. cit, 1992.

examination results. The most significant factors in the light of which this relationship is considered are economic and organisational resources. The relationship of quality to cost is determined by the degree to which utilization of facilities, availability of educational materials, unit costs per student, cycle costs per graduate and quality of student-teacher interactions meet stated objectives and/or desired outcomes.

For example, the economic resource concern of the utilisation of facilities such as class sizes is used to calculate both student:teacher ratios and classroom:teacher ratios in relation to student achievements. Comparability research indicates that class sizes, within broad limits, are not significant in improving student achievement ²³ Such calculations are done after correlating statistically examination pass rates with class sizes and may also include contrast group comparisons with other schools. Schwille et al (1986) and Adams and Boediono (1992) ²⁴ however, point out the importance of differences in contexts especially between developed and developing countries.

The policy recommendation that emerges out of these analyses is that investments - inputs - ought not to be directed to increasing class sizes, since student achievement - output - is not thereby improved. This recommendation is made on the basis of no positive or significant correlation being found between class sizes and levels of student achievement. Such an analysis is conducted in the first instance to assess whether prevailing investment patterns are effective, that is whether the cost inputs made to build more classes in fact generate the expected

²³ World Bank: Education in Sub-Saharan African: Policies for Adjustment, Revitalisation and Expansion, A World Bank Policy Study, Washington, 1988; Lockheed and Verspoor: op cit, 1990; Plowden Report, Central Advisory Council for Education, London, 1967; Coleman Report by Coleman, J et al, Equality of Educational Opportunity, Government Printing Office, Washington, 1966.

²⁴ Schwille, J: "Recognising, Fostering and Modelling the Effectiveness of Schools as Organisations in Third World Countries" mimeo, unpublished, 1986; Adams, D and Boediono, : Developing Effective Educational Systems, (1992).

Schooling in South Africa: What makes an effective Principal?

**Research in Progress on behalf of the
Management of Schools Training Programme**

A paper prepared for the IEQ Conference,
held in Cape Town, 30 March 1994

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THE MANAGEMENT OF SCHOOLS TRAINING PROGRAMME

The paper that follows is a summary of research in progress on behalf of the Management of Schools Training Programme (MSTP). For information, MSTP is a newly formed NGO that has been in existence with full-time staff since the end of 1993. Prior to that, it was in an embryonic format for a year developing as needs emerged and consultation was followed.

MSTP emerged as an initiative of the Canadian Teachers' Federation (CTF), SADTU and the Community-Based Educational Programme Trust (CBEPT). Its mission is to help improve the management skills of education leaders, especially school principals.

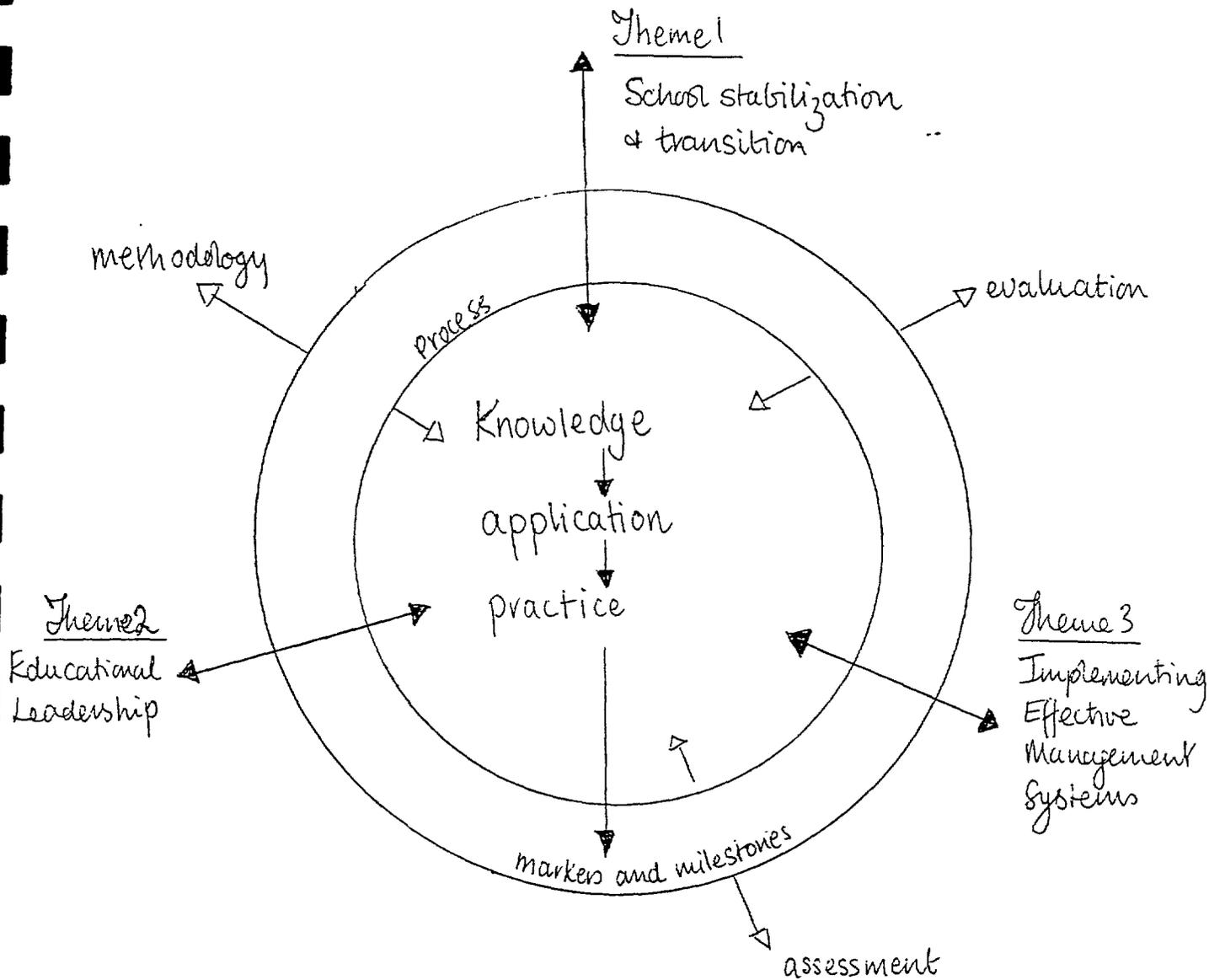
As a first venture, it is working with the Faculties of Management and Education of the University of the Witwatersrand in the development of a Further Diploma course. Known as the *Further Diploma in Education Development, Management and Administration*, the course is open to principals, deputies and heads of department who have M+3 as a qualification. However, there are other admission criteria, namely:

- * a principal will only be accepted if his/her deputy or HoD is also. In other words, two applicants per school is a requirement
- * the applications of the principal and deputy are supported by the staff and senior students. Teachers and students will be involved in exercises set by the University and there must be commitment to 'be involved'
- * the schools have to work in a 'cluster of five'. Principals must be prepared to work with other principals.

The course is unique in that it brings together two universities faculties and an NGO. The aim of the course is:

to increase management capacity in schools by initiating and implementing appropriate and credible courses and activities for school leaders and other stakeholders through procedures and processes based on democratic principles.

The following framework gives an overview of the course



The various components of the framework are explained further below :

Modules: The course offers eight modules of input from the Faculties of Management and Education with practical, skills workshops provided by MSTP. The modules are integrated and work/exercises developed for one module will be used in another.

The modules will be offered during your course in the following order:

First Year: Contextual problems in South African education
Curriculum development and instruction
Issues in the management of schools
Approaches to evaluation and assessment

Second Year: Organisational theory and practice
Principles and practice of public management
Human resource development for the management of schools
Educational Development, policy and planning

Each module will be presented during the residential weeks at the University, with assignments to be completed in the school environment.

All modules can be placed under one or more themes shown on the framework, that is:

Theme 1: School Stabilisation & Transition
Theme 2: Educational Leadership
Theme 3: Implementing Effective Management Systems

The themes run through the course in a parallel manner.

Process: The Further Diploma Course follows a distinct **process**. This process has been developed to ensure that course participants engage in activities that **change**, or aim to change, the school environment. This is effected by increasing management capacity in individuals who in turn implement **change**.

The whole process begins with:

- * participants perceptions about their school context
- * a reflection on the dynamics of management in schools
- * an increase in **knowledge** of educational and management topics and debates

followed by:

- * conceptualisation of the complexities of management schools
- * an **application** of this Knowledge through individual and collective assignments/exercises in context

followed by:

- * the **practice** of skills learnt and change in the school's operation

The total process is seen through selected markers and milestones which are jointly and agreed to by course presenters and participants.

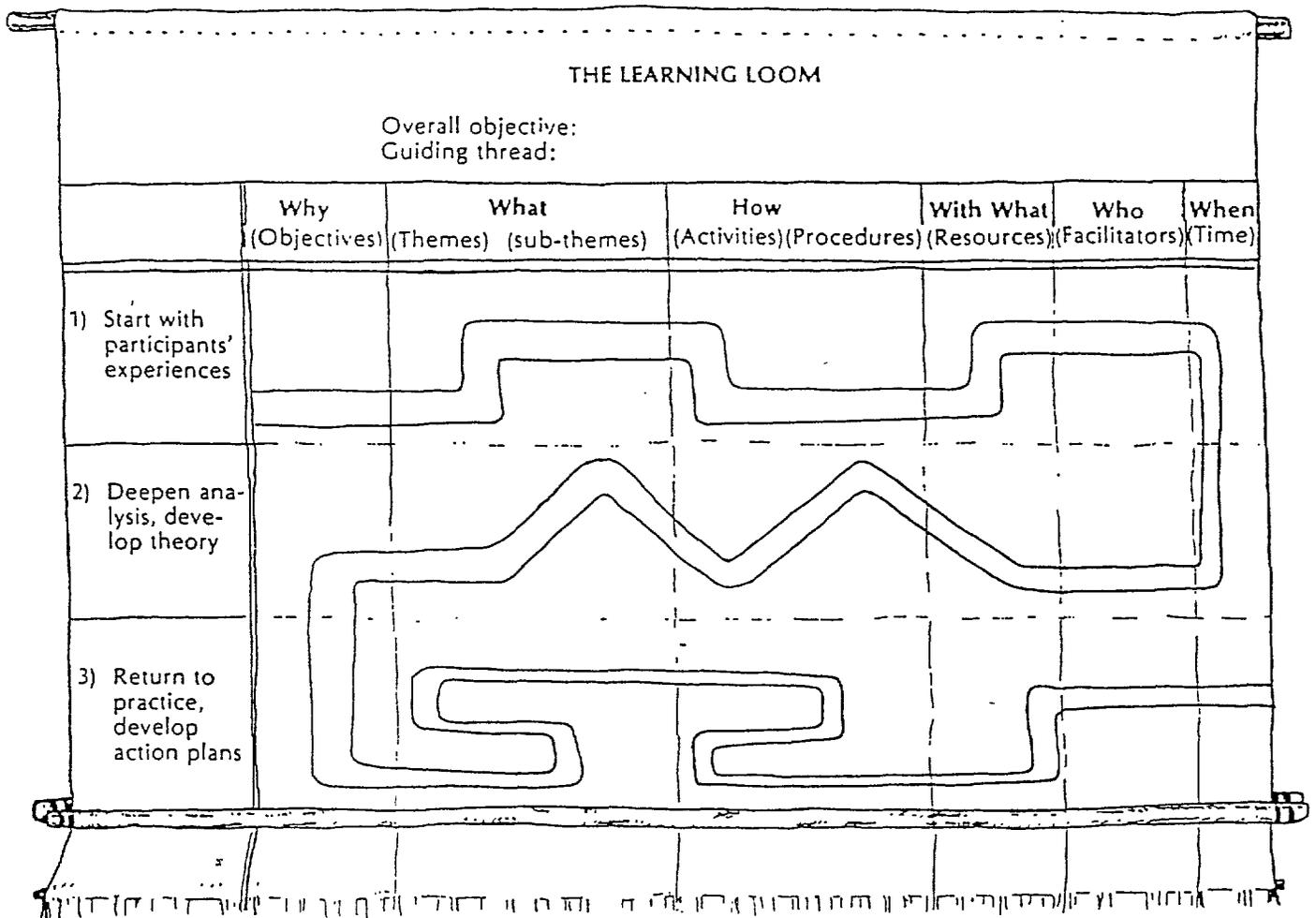
Methodology:

The course methodology is a mixture of formal lecturing, workshops and practical skills training.

The presentation and style will be based on experiential and interactive learning processes with an emphasis on case studies and group work. The approach will be problem/issue based and oriented towards service in the school by merging theory with practical experience.

You will be encouraged to present your insights, engage actively in discussions and critically assess your own performance. Discussions will be in addition to case studies and group projects, be based on your reading and research; classroom work and stimulus materials.

Emphasis is placed on adult learning techniques and the course develops through input from participants, shared experiences and reflection. In this regard, the course is guided by Paulo Freire's Learning Loom.



The experience of individual educational leaders will inform the course and to some extent will dictate the assignments given.

In addition to the above, the staff believe that understanding grows through action, dialogue and continuous reflection. Your cooperation and participation in the activities designed by the staff for you in the school and cluster is, therefore, of crucial importance since you are required to take responsibility for your own growth and learning.

Evaluation:

During the course, there will be opportunities to evaluate the input given, the progress made and whether course, individual and school objectives are met.

Evaluation is a very important part of the course. For adults, it is crucial to ask these questions after working on a new learning technique/approach:

- * What have I learnt?
- * Where will I use it?
- * How have I used it?

Participants will be required to reflect regularly on their own progress.

The Learning Loom referred to above is useful here. It provides the framework for synthesising theory and practice which is required in the process of learning.

As the Loom is set up with vertical and horizontal threads, so the course framework has vertical and horizontal dimensions.

Assessment:

This is set by MSTP and the University for the various blocks.

Overall, assessment will be as per the researched competency model.

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**SCHOOLING IN SOUTH AFRICA:
WHAT MAKES AN EFFECTIVE SCHOOL PRINCIPAL?
(RESEARCH IN PROGRESS ON BEHALF OF
THE MANAGEMENT OF SCHOOLS TRAINING PROGRAMME)**

Introduction

The Management of Schools Training Programme (MSTP) was established as a result of the crisis in schooling (primarily in DET schools) where principals were not coping with the challenges facing them on a daily basis. During the 1980s and early 1990s, principals faced increased student unrest, teacher strikes and parental indifference which affected them to such an extent that many withdrew from the system or became paralysed by it. These principals constantly had their authority challenged and their legitimacy questioned.

In the beginning of 1993, research was undertaken to identify the characteristics of an effective school principal. This paper highlights preliminary work to date, which will inform MSTP in course design and implementation. MSTP aims to improve the management skills of Principals and Deputies by involving them and the school in an innovative Diploma course.

In 1993, when SADTU teachers were on strike many principals felt threatened and alone. Some were chased from their schools by disgruntled teachers, thus emphasising the complete breakdown between levels of authority within schools. Teachers rejected principals as the stooges of an apartheid, illegitimate system. In many communities, the once honoured and revered principal is viewed as a failure and incompetent. More than ever before, black schooling is on the brink of total collapse.

In spite of the crises, there are many principals who continue to run their schools, using leadership styles and methods appropriate to their needs. Exam results are good in these schools. The schools have a 'culture of learning' and many students talk with affection about their education experiences. These schools are viewed by parents, teachers and students as offering good education and there is always a long waiting list for admission.

But what has set them apart from others? Why have they survived in a crisis when others have not?

For research purposes, the questions posed were:

- * What characteristics makes these principals effective leaders?
- * How do they continue to exist in situations where others have failed?
- * Is their leadership style democratic, autocratic, or what?
- * Can a competency model be devised to for an effective principal?

The last question arose because the research process was driven by a training need to measure effectiveness in quantifiable 'chunks of something'. Competence-based management training is used extensively throughout the corporate world and jobs are defined in terms of competence. It therefore seems logical to extend the concept of competence and management to school managers, that is principals.

It was felt that if the answers to all these questions can be found, MSTP will be in a better position to devise a course for principals and educational leaders. The answer to the last question posed is the most important as it helps establish a focus and a way of assessing the progress of principals who are and will be attending the Further Diploma course. How to answer this question is the focus for the rest of this paper.

Preliminary Literature Survey

A preliminary investigation of South African literature on schooling showed that very little research had been undertaken on what makes an effective school principal. Questions of leadership style, democratic governance, accountability and responsibility are mentioned in papers (eg NEPI, 1992) and books (eg Hartshorne, 1992) by leading educationalists but none identified competences that had been measured in and verified by a research process.

There are, however, several successful programmes that train principals in management knowledge and skills are being run in South Africa today. One such programme, TOPS (Teacher Opportunity Programmes) offers courses that give principals a wide range of skills but the criteria of success on the Programme is not defined in competence terms, per se.

To the author's knowledge, no-one in South Africa has defined outcomes of an educational management course in terms of competence.

Outside of South Africa, research on the competences of school managers has been undertaken in the UK, Australia and the United States. For this stage of research, the work of Derek Esp in the UK is highlighted as being particularly appropriate. He states that competence in the UK is defined as:

"A description of something which a person who works in an given occupational area should be able to do. It is a description of an action, behaviour or outcome which the person should be able to demonstrate". (P19)

He further submits that this definition is not fixed and offers it as a best option from which to start the development of a competency model. His published book "Competences for School Managers" (Kogan Page, 1993) describes a methodology and approach to defining a competency model for school managers. He proposes a matrix of competences which have been identified via assessment centre activities with UK principals.

Developing the Research Approach

Underpinning Esp's work is the research of those who have examined management competences in industry. One of the key contributors to the understanding of competence and how to use it is Burgoyne who in 1989 defined competence as the "ability and willingness to perform a task". Burgoyne further identified eight underlining problems that can undermine the development of a competency model. Esp summaries these for us as follows:

- * Management is not the sequential exercise of discrete competences. Competence lists illuminates facets of a complex whole. How do we reintegrate competency ratings to achieve a view of holistic managerial performance?
- * There is no technical approach to measure competence. Assessment can only be by way of grounded and informed judgement.
- * There is the problem of universality. All managerial jobs are different at the detail level but the same at a high level of abstraction.

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- * The moral, ethical, political and ideological aspects of management have to be addressed. Values and mission are very much a part of management. Competent management has to involve engaging and mutually adjusting individual and organisational values.
- * The very nature of management is a problem. It is a creative activity which moves its boundary.
- * The moral, ethical, political and ideological aspects of management have to be addressed. Values and mission are very much part of management.
- * There are many rights ways to manage and any competency-based system must allow for this.
- * Being competent is different from having competences. Managerial competences cannot just be used as a tool-kit list.
- * The issue of collective competence has to be addressed. People work in teams and groups where goodwill and cooperation are required. It is important to develop collective competences.

Bearing these problems in mind, it was decided to test out Esp's proposed competences (see Attachment 1) in schools that were perceived as successful by the users. Hence, at this initial stage, a successful school is defined as one that has produced individuals with good examination results and the school is accepted by community stakeholders as part of the community and an essential asset to it.

Choosing schools was very difficult, so a few assumptions and decisions were made:

- * Matric examination success is deemed a sign of school success. Therefore, only secondary schools will form part of the initial sample in stage 1 of the research process.
- * Schools which produce matriculants with passes at higher grade in mathematics and science are more likely to be successful.

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- * Principals of urban and rural schools will demonstrate the same range of competences but there will be a difference in what they perceive as priority competences.
- * Teachers' and pupils' opinions about the schools will show whether the school is successful or not.
- * Successful schools imply effective principals.

Remembering these criteria, some of the schools selected were:

Tsogo High School	Garankuwa
St Matthews School	Soweto
Hofmeyr High School	Attridgeville
St Barnabas College	Johannesburg
Trinity High School	Attridgeville
Sacred Heart College	Johannesburg
Rosebank Convent School	Johannesburg
Risinga High School	Giyani
Pax College	Lebowa
Motse Maria	Lebowa
Garlandale High School	Cape Town
Durban Girls High School	Durban

These schools all have a majority of black students. A large proportion of the schools have had a major crisis to deal with in the last two years. DET exams are written in most of the schools and all schools have been in existence for more than 10 years. An approach was made to each principal who agreed to be interviewed by the author.

Research Process - Stage 1

The competency approach adopted by McBer and associates (Boyatzis 1982) was a land-mark study for the identification of competences required by effective managers. In 1979, two thousand managers in different types of jobs in the public and private sector were interviewed and a list of competences generated.

Boyatzis (1982) states the competences are causally related to effective behaviour, as measured by external performance criteria and there is evidence that possessing the appropriate characteristic precedes and results in effective behaviour.

Central to a competency approach is the identification of superior performers and the setting of standards against which other information can be compared. This confirms the approach that the initial research must be with good, effective principals, assumed to be the leaders of successful schools.

Boyatzis records that McBer identified eighteen managerial competences that were grouped into four clusters. These are:

Goal & Action Management Cluster

1. Efficiency orientation
2. Pro-activity
3. Concern with impact
4. Diagnostic use of concepts

Directing Subordinates Cluster

1. Use of unilateral power
2. Developing others
3. Spontaneity

Human Resources Management Cluster

1. Accurate self-assessment
2. Self-control
3. Stamina and adaptability
4. Perceptual objectivity
5. Positive regard
6. Managing group process
7. Use of socialised power

Leadership Cluster

1. Self-confidence
2. Conceptualisation
3. Logical thought
4. Use of oral presentations

Effective behaviour in the workplace is the result, according to Boyatzis (1982) of a fit between the individuals competences, the job demands and the organisational environment.

Esp also clusters his competences. His work is informed by Boyatzis' approach, although the clusters are named differently:

Administrative Cluster

1. Problem Analysis
2. Judgement
3. Organisational Ability
4. Decisiveness
5. Creative Problem Solving

Interpersonal Cluster

6. Leadership
7. Pedagogic Leadership
8. Sensitivity
9. Stress Tolerance
10. Developmental Awareness

Communicative Cluster

11. Oral Communication
12. Written Communication

Personal Breadth Cluster

13. Range of Interest
14. Research Motivation
15. Educational Values

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It was and is thus intended to examine information presented during interviews against the Boyatzis model for managers as well as the Esp's model. Questions were prepared that related to a cluster of competences. It is easier to develop a questionnaire when thinking of a cluster of competences than individual ones.

Each principal was interviewed for a period of two to three hours using the structured questionnaire as shown in as shown in **Attachment 2**. During the interview, if a principal wished to develop a point further, he/she was allowed to do so, and supplementary questions that opened-up debate were allowed to elicit more information. All principals were eager and willing to take part in the interviews and were surprised to hear that they were considered successful by their various stakeholders.

One question aimed to identify a critical incident which had affected the principal's modus operandi and from which additional information could be gleaned to identify other competences.

"As a principal, what critical event was a turning point/major learning point for you, and why?"

Detailed notes were taken during interviews. A research assistant from Wits Business School helped check the transcripts in order to establish whether the competency model held true. This stage was difficult as highly subjective decisions were made as to whether the selected competences were present or not. Many of the listed competences can only be fully observed in an Assessment Centre or by spending time with the principal in his or her school. However, amongst those interviewed, evidence of the listed competences of Esp was seen.

The interviews also generated information which could not be categorised. This suggested the presence of other competences.

An examination of the extra information gleaned led to definitions of other competences, and to do so the works of Greenleaf (1977) and Sergiovanni (1992) were referred to. Definitions for additional competences were stated as:

- * **Servant leadership** - an ability to lead through legitimacy, given by teachers, parents and students in response to, and in proportion to, the clearly evident servant stature of the leader. To lead based on the values/needs of others to create followers not subordinates.

- * **Moral Authority** - bases decisions and actions on values and feelings that are guided by the well being of others. Knows right from wrong.

In addition, many principals show ability to take risks at levels not normally associated with schooling. Risk-taking is necessary to survive in schools where there is a high level of violence in the community and where normal schooling is an exception rather than the rule. Each day a principal in a crisis situation takes a decision that is at a high risk level. Therefore, it is suggested that a third new competence is also present namely:

- * **Risk-Taking** - an ability to take a chance on an action when the outcome is not clear, and to live with the consequences.

These three competences were evident in all interviews.

It is interesting to note that the principals of many of the schools chosen belonged to a religious order or were highly committed Christians. Historically, the 'good' schools have always been those run by religious orders. They talked about God, God's presence and God's support in their work, and for many their spiritual belief guided their daily activity. Definitely the competence called Moral Authority is highly evident in all those principals who placed God above anything else.

The most successful principals did not see themselves as leaders. They recognised the need to give guidance and to fulfil the tasks or to complete the tasks for which they were being paid. But not one saw him or herself as a top-down leader. Many believed that teachers led the school and gave direction. They believe the principal's role is to crystallise decisions and to intervene only when asked. In these schools, the teaching staff were 100% behind the principal, supporting the principal in all activities and were followers not subordinates.

In some schools conflict and danger are part and parcel of daily life. Principals often risk their lives to ensure the safety of others, but the principals in the chosen schools did not shirk from decision making and were able to take decisions in extremely difficult situations and live with the outcome.

The addition of three new competences meant that the principals were exhibiting a more complex range of skills than their counterparts who were researched by Esp in the UK. It is logical to see where this comes from when one examines the South African apartheid state and how individuals have to survive in such.

Research Process - Stage 2

To confirm or otherwise the competency model a much more extensive interviewing format must be undertaken with at least another 20 schools. Once this has been completed, the total set of interviews will be analysed and if the competency model continues to be confirmed, a ranking exercise will be used to ascertain which competences principals believe to be the most important. Attachment 3 is the suggested ranking exercise which has already been tested in one school by the staff for ease of understanding and completion.

Research Process - Stage 3

CASE (Community Agency for Social Enquiry) based in Johannesburg has been requested to help complete the research process in the following way:

Phase I

- * To choose five schools whose principals have just been selected for the Further Diploma in Education Development Management and Administration and to examine these schools in terms of environment, resources, pupil enrolment, teachers and teacher qualifications etc. In-depth interviews with principals will be held as well as focus groups with staff and students but, most importantly, CASE will observe each principal for a week to generate a task list of what a school manager does on a day-to-day basis.

Phase II

- * This process will then be expanded to other schools whose principals are attending the Further Diploma Course. However, the process will be less intensive as the research instruments will have been drawn-up based on information produced during Phase 1 of the research.

Phase III

- * A final research phase will be conducted in a year's time and in two years' time to ascertain whether the course has altered the principals' behaviour and whether the schools have consequently changed. This last phase of research has got to be defined more carefully, but it is hoped to develop a model to measure organisations and change in schools.

Conclusion

In presenting the ways that MSTP will establish an assessment procedure and a competency model for the Further Diploma course, it is acknowledged that the research is at a very preliminary stage. However, there are some indications that the thinking is on the right track. This paper is to be presented for discussion and debate at the IEQ conference in Cape Town on 30 March 1994 and is not meant as a definitive statement on competency models. The author wishes that her permission be sought before reference to this paper is made in any article to be published.

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Definition of Competences used in Research Process

1. Judgement

Ability to reach logical conclusions and make high quality decisions based on available information; skill in identifying educational needs and setting priorities; ability to evaluate critically written communication.

2. Decisiveness

Ability to recognise when a decision is required (disregarding the quality of the decision) and to act quickly.

3. Problem Analysis

Ability to seek out relevant data and analyse information to determine the important elements of a problem situation; searching for information with a purpose.

4. Organisational Ability

Ability to plan, schedule and control the work of others; skill in using resources optimally; ability to deal with a volume of paperwork and heavy demands on time.

5. Educational Values

Possession of a well-reasoned educational philosophy; receptiveness to new ideas and change.

6. Stress Tolerance

Ability to perform under pressure and during opposition; the ability to "think on one's feet."

7. Leadership

Ability to get others involved in solving problems; ability to recognise when a group requires direction, to interact with a group effectively and to guide them to the accomplishment of the task.

8. Personal Motivation

Need to achieve in all activities attempted; evidence that work is important for personal satisfaction; ability to be self-evaluating.

9. Written Communication

Ability to express ideas clearly in writing; to write appropriately for different audience - students, teachers, parents, etc.

10. Oral Communication

Ability to make clear oral presentation of facts and ideas.

11. Sensitivity

Ability to perceive the needs, concerns and personal problems of others; skill in resolving conflict; tact in dealing with persons from different cultures/backgrounds; ability to deal effectively with people concerning emotional issues; knowing what information to communicate and to whom.

12. Range of Interests

Ability to discuss and understand a variety of subjects - educational, political, current events, economic, etc.; desire to take part actively in events.

13. Creative Problem Solving

Ability to find new and innovative ways to solve problems; always looking for alternative solutions.

14. Developmental Awareness

Taking continuous action to improve personal capability; identifying and providing opportunities to improve the capabilities of other people; receptiveness to new ideas from others; ability to generate new ideas; ability to perceive longer-term changes and to prepare effectively for them, and evidence of implementation of change.

15. Pedagogic Leadership

Ability to evaluate classroom performance in relation to teacher objectives and student outcomes; ability to work effectively with teachers and students to improve classroom performance; understanding and experience of the processes and techniques of teaching and learning.

16. Boundary Management

Has a knowledge of changing situations outside the school, including local, governmental and political pressures, and can identify potential problems and opportunities associated with them; bases actions on an awareness of the impact and implication of these wider societal, governmental and political factors; has experience of managing conflict in these areas.

17. **Risk Taking**

Ability to take a chance on an action when the outcome is not clear and to live with the consequences of that chance.

18. **Servant Leadership**

Ability to lead through legitimacy, given by teachers, parents and students, in response to, and in proportion to, the clearly evident servant stature of the leader; to lead based on the values and needs of others; to create followers not subordinates.

19. **Moral Authority**

Bases decisions and actions on values and feelings that are guided by the well-being of others; having a strong sense of what is right or wrong.

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Structured Interview Questions

- to be used with Principals -

1. **Bio Demographics**
Age / home language
Qualifications
Work experience
Years as Principal/Deputy/HOD/etc.
2. **School Details**
Secondary / Primary
Total number of pupils
Total number of pupils in Standard 10
Number of staff
Subjects taught
Extra mural
Matriculation Board
1992 matric % pass rate and number
1992 matric (exemption) % pass rate and number
Structures in School - SRC/PTA/PTSA/Board of Governors, etc
Community activities.
3. What do you think are the essential components that make-up or define a successful Principal?
[What makes a Principal successful?]
4. What factors/constraints have there been on you as a Principal? [Why did they occur? How are you handling/coping with these and solving issues?]
5. What factors have helped you succeed as a Principal?
6. How do you operate as a leader: what do you do as a leader that makes a difference?
7. What approach /or what do you do/ to make staff more effective?
8. How do you evaluate success and failure in your school?
10. What is your approach with regard to teaching and learning in the school? What happens in your school?
11. What courses / opportunities / events have you/staff attended / been involved with recently?
Please give details and why these particular courses etc.
12. What makes your school effective?
13. As a Principal what critical event was a turning point/major learning point for you and why?
14. If you were running a training/development programme for Principals of schools what topics/areas/skills, in order of importance, would you cover in the programme?

WESTERN CAPE SCHOOLS EXPLORATORY SURVEY
A UCT / EDUCATION FOUNDATION PROJECT

1. INTRODUCTION & OBJECTIVES

The Education Foundation, in collaboration with the Education department of the University of Cape Town, proposes to undertake an exploratory survey of a number of schools in the Western Cape.

This exploratory investigation will be undertaken as a **pilot** to an intended nationwide investigation exercise. The ultimate aim of the whole exercise is the development of school profiles which can better inform initiatives, discussions and practical interventions around educational reconstruction. More specifically, this exploratory study is intended to lay a foundation for the development of an investigation process that can:

- a) Inform an assessment of the material and human resources available for education in communities, the educational needs of communities, and the quality of education offered in schools within communities.
- b) Provide a means through which education change agents - government and non-government - and communities can make informed decisions around interventions in education reconstruction. Such decisions might for instance include planning priority areas for intervention on the basis of need matched against capacity of schools and communities to manage resource and reconstruction interventions.

It is also envisaged that the survey will yield three important by-products:

- i) an **investigation tool/process** that can be fine-tuned and used nationwide in further surveys by the Education Foundation, local NGOs, educational institutions, individual communities, etc.,
- ii) an **action strategy/process** that will be sensitive to community needs and will be a product of informed analysis and consultations with communities, NGOs, education specialists, government, etc., and
- iii) a mechanism that may validate information currently available in school files and departmental records, collected via the ET20, as well as capture additional important school-specific information currently not being collected.

2. ACTION

The proposed preliminary investigation will put into the field about 10 full-time researchers. It will commence mid-February and continue through March 1994, whereupon analysis of data from the fieldwork will begin. This pilot exercise is intended to culminate in a preliminary survey report to be completed by 31 May 1994. This report will be circulated across all participants of the pilot survey for review and comment, with a view to drafting a final report for even wider circulation by 30 June 1994.

**DEVELOPMENT OF
THE 1000 SCHOOLS PROJECT**

FEBRUARY 1994

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DEVELOPMENT OF THE 1000 SCHOOLS PROJECT

INTRODUCTION :

For the past year major NGO's, impacting especially on the formal education system, have been meeting together under facilitation by the IDT to consider a strategy for NGO impact in education under a new dispensation. These meetings are now culminating in national meetings throughout all nine projected provinces in South Africa to determine a strategic intervention that might be possible both regionally and nationally. The idea is to develop an approach which might find acceptance with a future legitimate Education Department.

HISTORY OF THE PROJECT :

A meeting of Science and Mathematics NGO's in March 1993 realised that with the impending elections and the imminence of a legitimate government, the way in which the NGO sector had functioned thus far was due to change. While it had largely been set up in response to an illegitimate government and a poverty-ridden education dispensation, funded largely from private sector sources, this situation was due to change. It was felt that the NGO's needed to examine a far greater service orientation toward the future dispensation and to this end the IDT was asked to facilitate meetings of NGO's to develop some way in which the NGO's could respond to the coming changes.

This facilitation consisted of not only organising meetings but in carrying out research on the NGO's themselves to determine the level of service that might well be offered. It became clear from this that the NGO's that impact on the formal sector in education are very well-suited to mounting a major in-service Education and Training programme on behalf of a future State.

Given that the present Education authorities have had great difficulty in developing suitable in-service training programmes and given the pre-eminence of the NGO's in this field, this is a clear area of possible assistance that could be given in a new dispensation. An analysis of the capacities of a limited number of NGO's demonstrated that in the areas of Science, Mathematics and English, the NGO's not only cover the content area from Sub A to Matric with suitable programmes but they are also geographically distributed right around the country. It was felt that this was a useful possible model to develop to demonstrate NGO capacity and service capability in the future.

At the same time it was realised that activity as taken place in the past could no longer be countenanced. For example, all the research has shown that a school-focused approach is essential if INSET programmes are to succeed. The school needs to be treated far more holistically than simply making piecemeal interventions which it is hoped would produce qualitative improvement. At the same time it was also realised that in-service training of teachers and principals have limited efficacy if they are not placed within the context of the entire school as organ for change.

At the same time the very extensive literature which has now developed around the international reform movement in schooling has proved to be extremely helpful. It is accepted internationally that education as practised has not been the resounding success that it is often displayed as being. While this is true in highly-resourced countries it is even more so in areas of acute disadvantage. Education - an essentially elitist activity designed for the privileged in society - has had limited impact on the mass of people. This, of course, is our experience in South Africa and has rightfully been attributed to statutory impoverishment of education, especially for disadvantaged communities. However, this is only a partial reason for the ineffectiveness of schooling in general. All the research indicates that there are severe structural impediments in the way education is managed which prevent greater levels of

efficiency being achieved. In a programme of NGO involvement in education it was thus essential that cognisance be taken of these impediments, especially given the luxury which we will enjoy of a complete change in administration of government in this country in the near future.

THE ESSENTIAL THRUST OF THE PROGRAMME :

The essential change in focus within the programme is well-encapsulated in the movement from *An NGO Initiative in Education* to *A 1000 School Programme*. The most significant finding of the reform movement internationally is that efficient schooling will not happen regardless of the amount of resources which are poured in unless the governance of schools is *handed back to the community* to use the famous punchline of the Americans. What this amounts to is that each school needs to be treated as the holistic entity which needs to be empowered. In the first instance, this means that a Governing Council needs to be set up with all the stakeholders in the school being involved. These Governing Councils would obviously include the parents, the staff of the school, student representation as applicable and other community constituencies which impact on the school. There is a clear recognition of the fact that schools are there for the benefit of the community and not vice versa.

This essential change in governance encapsulates the essential notion of accountability often absent in the bureaucratic maze which people have managed to set up to govern the activities within schools. The effect of this has been that schools and especially individual teachers have very undefined levels of accountability. Put another way, *the buck can always be passed*.

The essential point of the entire initiative has thus moved from some way in which the NGO's can impact on the schools to how the school as an entity could invite the kind of help which would continue to empower it as the fundamental unit for change. The

crucial point that should not be missed is that with any change in bureaucracy or governing structures - unless the activity of a teacher in his or her own classroom can be changed, very little in terms of quality of education will alter. With the best will in the world no bureaucracy, either outgoing or incoming, with the best intentions, can do this if it is not generated as part of what that teacher wants to do and is required to do in any case. The point of establishing the school as the organism which has to facilitate that change recognises this essential point.

THE MATTER OF CONTROL :

As is clear from what is outlined above, the locus of control for educational reform must be the individual school and its Governing Council. This is the unit that needs to be empowered and to whom services need to be provided to enable them to make the kinds of decisions which will facilitate proper teaching and learning and pupil progress through the years of schooling. This is also the unit which needs to be put into a position to facilitate positive outcomes from the years that the children spend in school. It is, however, obvious that control without financial backing is less than effective and thus the programme will endeavour to finance the school as entity. What this implies is the following :

- the Governing Council needs to have an amount of money which it can apply in the best interests of the school
- the Governing Council should be put in a position to engage the services of whatever agencies it deems necessary to improve the quality of the educational process within the school
- the nature of what is available will then need to be clearly spelled out.

The implications of the above is that the programme will not attempt to foist NGO activity onto schools as the recipient but rather create constructive partnerships between the schools and the NGO sector so that there is a clear acknowledgement of the role which the NGO's may play but that there is also a very clear realisation that the client, namely the Governing Council of the school, is the one that will decide on the nature of those services. This also implies almost automatically that it would be essential that NGO activity is rationalised and that there is a minimum of unnecessary overlap between various organisations. This does not necessarily imply that there should be no competition but that with limited resources it would be less than efficient for any number of organisations to be trying to access the same pool to provide the same services. In practice, this will mean that each Governing Council will be allocated an amount of money for the school in this programme. It is anticipated that this money may be used in the following way :

- an amount of general school improvement as, for example, landscaping, some kind of resources for the school, etc
- hiring the services from NGO's for specific targeted qualitative improvements which the school feels that it needs.

The NGO's will be paid out of the overall school budget for these services. Clearly, it would be inefficient to do this on a school-by-school basis and, therefore, this would probably need to be co-ordinated.

Obviously, a reasonable level of NGO co-ordination will need to take place and mechanisms for dispensing the funds will need to be set up. It is not anticipated, however, that an extensive bureaucracy will need to be established to manage the programme.

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THE MATTER OF SELECTION :

Clearly this is a crucial component for the success of the overall programme. In keeping with the bottom-up approach in the entire programme, it is anticipated that the selection should not be done in any kind of top-down fashion. Clearly, the provincial needs will need to be carefully determined so that the overall amount of money may be apportioned out in accordance with this need. Obviously, the areas which have the largest concentration of schools and additionally have the highest need would have more schools involved in the programme than another region. This will be relatively simple to determine according to the known demographics of schooling within the country. Once the provincial allocations are made it will be possible to use the same process to make sub-provincial allocations of numbers of schools on the programme. Once this is done, however, it is anticipated that a possible mechanism to consider in selecting individual schools will be left to the schools in a particular region themselves. Rather than some outside body deciding on the schools it might be far more democratic to allow a regional community to determine the schools which will be on this programme. Clearly, schools will have to meet a number of criteria. These include :

- Φ a willingness to participate in the programme
- Φ the willingness to set up an appropriate Governing Council
- Φ a desire for the identification of suitable qualitative improvements within the school, etc.

A list of criteria will in time be drawn up but it is essential that the greatest autonomy in selection be left to the communities themselves. The process is thus assured of being far more democratic and bottom-up than some other body making these decisions. There do exist around the country analogous examples of how this process might work.

CONCLUSION :

It is essential for qualitative improvement in schooling in the country that the unit of accountability be made the school itself. Nothing in the programme should mitigate against this happening. If we are to leave all improvement in a future dispensation to the incoming bureaucracy it will carry a burden which will far exceed its capacity to deliver either in the short or in the long term. We need to trust the democratic principles and the inherent ability of people to improve themselves if given the correct opportunities.

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DIRECTOR : EDUCATION**

11 February 1994

IMPROVING EDUCATION QUALITY (IEQ) PROJECT

Conference on "Effective Schools, Effective Classrooms"

Cape Town, 30 April 1994

Salient Points Raised During the Conference

- (1) Classroom behaviors are, by and large, rational e.g., bureaucratic requirements dictate behaviors which limit innovation in the classroom.
- (2) There is some variation in instructional practices in South African classrooms. That is, even while most practices are teacher-centered there are instances in which creative presentations, interactive questioning and student-driven inquiry could be identified.
- (3) Classroom profiles are critical as a baseline for understanding change. Research need not be limited to formalistic methodologies e.g., photographic records used in the FRD research.
- (4) how certain classroom factors (inputs) interact in real contexts is what needs to be understood.
- (5) research impact must be enhanced, a process best achieved through models of research which are participatory, classroom-based and teacher-driven; however, the research model pursued depends on the purpose of the research.
- (6) assumptions behind the liberal model of education (questioning, active participation, student-centred classrooms etc) must be critically examined. The purposes of a particular instructional episode must be understood, rather than measure all teaching behaviours against a fixed, external measure of adequate teaching.
- (7) recognizing or pursuing quality is not a substitute for changing the material conditions within which teachers and students work.
- (8) significance of insider perspectives (insider knowledge) on what is good/effective (cp. to external checklists).
- (9) definitional issues are political (e.g., conceptions of quality and effectiveness) since they involve choices which often have different social and financial consequences.
- (10) self-reports by teachers and other need to be critically assessed and not uncritically celebrated or privileged.

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