

**CLASSROOM ASSESSMENT IN MAURITIAN PRIMARY SCHOOLS**

**A thesis submitted for the degree of Doctor of Philosophy**

**by**

**Seeookumar Chumun**

**Department of Education, Brunel University**

**June, 2002**

## **Abstract**

This thesis explores teachers' current knowledge and practice about classroom assessment processes in the Mauritian primary schools and reports the results of a case study, the data of which were collected during the three terms of the school year in 1998 from four primary schools that included thirty-five teachers.

The interest of the case study is not to appraise the teachers' work or the school in any way; rather it is to accurately describe classroom assessment practices within the context of Mauritian primary schools.

The research addresses three main questions: why teachers conduct classroom assessment, how it is conducted and what is assessed.

The findings of the study indicate that teachers assess their pupils for three main reasons: providing feedback to the pupils and to themselves, reviewing the teaching methods and for diagnostic purposes. Another minor purpose noted is for communicating information to parents.

Questioning and observation are the two methods most common in the conduct of classroom assessment. Questioning techniques are mostly closed ones, with a view to seeking a specific answer from the pupils. Teachers interpret the information collected with reference to three general standards: criterion-referenced, norm-referenced and self-referenced.

In general, the findings indicate that teachers' practices are oriented more towards the traditional pedagogy in terms of emphasis on the lower level objectives, whole class teaching and focusing on the product. No provision is made for the able or the less able. All the pupils are treated the same and are given the same tasks.

Almost a decade after the introduction and implementation of the Learning Competencies and the scheme for Continuous Comprehensive Evaluation, it is found that Mauritian primary teachers do not have the relevant training in assessment to fully apply the progressive reforms.

Despite the education system being very centralised, it seems that teachers assess their pupils independently and without any support from the government. There is no monitoring, moderating or policing of policies. Assessment practices are derived from their habit and ideology rather than from the official directives.



## **Acknowledgments**

I am deeply grateful to Prof. Roger Murphy (University of Nottingham), Prof Roy Evans and Dr. Keith Wood (University of Brunel) for their support, advice and encouragement that gave me motivation to continue and eventually accomplish this study. A special word of thanks to my dear friend, Mrs. Jaya Busawon, for her invaluable support and help in reading the various drafts of this thesis and for providing me with constructive feedback.

My appreciation also goes to Prof. Patricia Broadfoot (University of Bristol), Prof. Caroline Gipps and Prof. Peter Mortimore, both from the Institute of Education (University of London) for their continuous advice and support. I am also very grateful to the staff of the University of London Institute of Education's library for allowing me to use its facilities.

I must thank Miss Amina Husnoo and Mrs. Lalita Machurchand, both from the Mauritius Examinations Syndicate, for their assistance in word processing and presentation.

My special thanks go to Mr. Soobass Daby and his staff at the National Computer & Information Technology Resource Centre of the Ministry of Education and Scientific Research (Mauritius) for providing me with facilities and expertise in computers during the final stages of the research project.

I would also like to acknowledge the help, support and cooperation of all the teachers and the schools that took part in this study.

Finally, I would like to thank my wife (Ranee) and my two children (Roshan & Reema) for their patience and continued support when I was endeavouring to complete my research study.

**June, 2002**

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## **Introduction**

If one wants to discover the truth about an educational system, one must look into its assessment procedures, what pupils' qualities and achievements are actively valued and rewarded by the system. How are its purposes and intentions realized? To what extent are the hopes and ideals, aims and objectives professed by the system ever truly perceived, valued and striven for by those who make their way within it? The answers to such questions are found in what the system requires pupils to do in order to survive and prosper, that is assessment.

Assessment, therefore, is a fundamental part of the teaching - learning process. It involves collecting, synthesizing and interpreting information to aid in decision making on a daily basis in the classroom for the improvement of teaching and learning.

Not only does assessment lie at the core of learning, it is also a major current issue in the education systems of many countries as well as Mauritius as a result of the examination reforms that are being introduced in the Mauritian education system especially at primary level (Learning Competencies for All, 1992).

One of the reforms which is very much related to this study and which is in the process of being introduced and implemented afterwards is the Continuous Comprehensive Evaluation (CCE) scheme (Master Plan of Education, 2000); Blue Print of Nine Year Schooling, 1992; MES, 1994).

Assessment is very crucial and there is already an extensive literature written on



the subject (Pidgeon & Yates, 1969; Gronlund, 1976; Ebel, 1979; Schofield, 1972; Thorndike, 1972; Hudson, 1973; Lewis, 1974; Broadfoot, 1979; Harlen, 1983; Murphy, 1987; Satterly, 1989; Gipps, 1990; Conner et al., 1991; Anderson & Bachor, 1993; Dummond, 1993; Pollard et al., 1994). So, why research and write more? According to Rowntree (1991), although a lot has been written on assessment, the literature takes for granted the present nature of assessment and seeks improvement merely through increasing its efficiency. Thus, for example, it is easy to find writers concerned with how to produce better multiple - choice questions, how to handle test - results statistically, or how to compensate for the fact that different examiners respond differently to a given piece of pupil work. It is much less easy to find writers questioning the purposes of assessment, asking what qualities it does or should identify, examining its effects on the relationships between teachers and learners, or attempting to relate it to such concepts as truth, fairness, trust, humanity and social justice.

Because of the reasons outlined above and also because it is an area where rapid changes are taking place in most education systems and its potential to assist in the teaching - learning process, an interest to explore teachers' current knowledge and practice about the classroom assessments in Mauritian Primary Schools was generated to widen my own understanding of assessment.

The interest of the case study is not to appraise the teachers' work or the school in any way; rather it is to accurately describe classroom assessment practices within the context of Mauritian primary schools.

This thesis therefore, explores classroom assessment processes in Mauritian primary schools and reports the results of a study, the data of which were collected during the three terms of the school year in 1998 from a sample of four primary schools which included thirty-five teachers.

### **Main Aims**

The main aims of this study are as follows:

1. To find out teachers' current knowledge and practice about assessments in Mauritian Primary Schools.
2. To show how important and useful assessment is in the classrooms.
3. To widen my own understanding of classroom assessment processes and their potentials to assist learning.

### **Research Questions**

In the course of exploring classroom assessment processes, this thesis will attempt to answer the following questions that are closely related to the problem.

*(a) Why do teachers assess?*

- How does assessment help teaching and learning?
- What are the importance and purpose of teacher comments?
- How are assessment results used?

*(b) How do teachers assess?*

- How often do they plan assessment?
- What sort of assessment do they apply?



- How do they respond to pupils' work?
- Are standards expected of a good piece of work explained prior to assessment?

*(c) What do teachers assess?*

- How many behaviours/characteristics are assessed?

Since classroom assessment is a fundamental part of the teaching - learning process, it is hoped that the findings of this study would make an original contribution to knowledge and a better understanding of the complexity of the classroom assessment phenomenon and also offer some guidance/recommendations to teachers, educational advisers, administrators, decision makers and teacher trainers towards more effective teaching and assessment.

The term 'Classroom Assessment' is used here to express the process of collecting, synthesizing, and interpreting information to aid in decision-making for the improvement of teaching and learning. It is a process that assists appropriate teaching and decision making by providing information on two fundamental questions: (a) How are we doing? (b) How can we do better? The fundamental role of classroom assessment is to provide authentic and meaningful feedback for improving learning and teaching practice.

For many people, the words 'Classroom Assessment' evoke images of pupils taking pen - and pencils' tests, teachers scoring them, and grades being assigned to



the pupils based upon their performance.

Classroom assessment, therefore, does not only include the full range of information teachers gather in their classrooms: information that helps them understand their pupils, monitor their instruction, and establish a viable culture, but it also includes the variety of ways teachers gather, synthesize, and interpret that information.

This research is basically undertaken from an exploratory point of view. It is in that exploratory spirit that the following report of the data and their interpretations are made. Obviously no legitimate attempt can be made from these data to make generalizations. Nevertheless, they may be suggestive of trends and approaches that could lend themselves to a more systematic plan and a more precise definition of variables in the future.

For the sake of convenience, this thesis is in two parts. The first part which consists of Chapters One to Three, discusses the background to the study and the research methodology while the second part, which consists of Chapters Four to Eight, presents the findings and the conclusion.

Chapter One describes the Assessment Developments in Mauritian primary education. Description of these would facilitate the understanding of the research findings.

The relevant literature related to classroom assessment is reviewed in Chapter

Two to identify and support the various purposes associated with the study. The literature survey, which is organised into four sections, not only deals with the wider and the basic purposes of assessment, as well as the importance of communication and diagnosis but also aims to point out how complex the assessment process is. The review also examines the contents of assessments and the nature and forms of teachers' response to pupils' efforts.

Chapter Three deals with the research methodology of the study. It discusses the uses and definition of a Case Study as a research strategy, its strengths and limitations and also how the data were collected, recorded and analysed.

The results of the interview and observational data of the first three case studies are presented in Chapters Four, Five and Six. The results of the case study of St George school are presented in Chapter Four while results of case studies of Elizabeth and St Anne schools are presented in Chapters Five and Six. The description of one of the case studies (Manor School) was placed in a separate appendix (Appendix B) for reasons of thesis length and also because its contents were very similar to the other three case studies.

The results for each case study are in two parts. The first part presents the findings from the interview data while the second part of the chapter provides results from observing the assessment co-ordinator in classroom assessment practices.

For each case study school, the teachers in standards IV to VI were asked a

number of questions relating to classroom assessment practices. They were asked why they assess their pupils (purposes), the different methods of assessing their pupils and what do they look for when they are assessing their pupils.

After the interview, the assessment co-ordinator (responsible for assessment activities at each case study school) was observed to find out the reasons for assessment, how assessment was conducted and what was being assessed. This was done to find out if what teachers say, is what they actually do.

A summary of the main findings and the conclusion of the study are found in Chapter Seven of this report.

The chapter that follows deals with the assessment developments in Mauritian primary education. Description of the education system could help the reader to understand the findings, and also explain the Mauritian teachers' practices and views.



## **Chapter One: Assessment Developments in Mauritius**

### **1.1 Introduction**

In this chapter, firstly the current state of primary education and of teacher education is briefly described. Secondly, developments in assessment at primary level are examined. Factors such as teachers and their training, administration, curricula, educational policies and implementing agents are also examined in order to understand how they interact and perhaps influence classroom assessment matters.

### **1.2 Background**

It is around the 1930s and 1940s that one can trace the beginnings of the historic movement for mass education in Mauritius. Until that time, in spite of the remarkable efforts displayed by missionaries like Jean Lebrun and religious bodies like the Roman Catholic church, the progress of education for the mass of the people continued to be slow. After the constitutional reforms of 1948, there was a commitment to "Education for All" which was conceived as a sine qua non to bring about greater social, cultural, economic and political equality in the former colonial society and this led to a substantial increase in both primary school provision and pupil enrollment.

In recent years, the Mauritian economy has expanded very rapidly. In the process, it has moved from a low-skill, low labour-cost economy to a much more skill-intensive one in which high levels of education and training are needed at all levels of the labour force. It was therefore felt important to provide the pupils with education at all levels to equip them with skills and knowledge that would be

appropriate for employment in a fast changing economy.

As a result of the expansion of the Mauritian economy and the necessity for high levels of training and education, the demand for more education increased and this led to strong pressures for more secondary education and the mushrooming of private secondary institutions. The 1960s and 1970s saw the development of tertiary education in Mauritius, with the establishment of the University of Mauritius (UoM), the Mauritius Institute of Education (MIE) and the Mahatma Gandhi Institute (MGI). It also saw the beginnings of distance education with the founding of the Mauritius College of the Air (MCA). In the 1980s, the Mauritius Examinations Syndicate (MES) and the Tertiary Education Commission (TEC) were established.

This period also saw the growth of technical training bodies as well as a Lycée Polytechnic combining technical and general education. The most important decision of the Government was in 1977 when secondary education became free for all children.

Although the school system has many positive achievements, like universal provision of primary education, free schools at all levels, total revision of the primary curriculum to take account of changing needs and current pedagogical practice and freely available textbooks, the system (according to the Master Plan for Education Review, 1991) faces important problems:

1. Some 10 - 20% of children do not attend pre-primary schools. Of those who



do attend, many are in unsuitable premises with inadequate teaching aids and with untrained teachers.

2. About 30% of all children fail the Certificate of Primary Education (CPE) examination after two attempts and drop out of the system at the age of 12 or 13. Some 6% of children fail in all subjects; such children may have learned little from their years in school. Children who drop out after failing the CPE twice are not allowed to take up employment or apprenticeship until the age of 15.
3. At the secondary level, 24% of pupils drop out after Form IV while over two thirds drop out after Form V. There are high rates of repetition – 48% at Standard VI, 22% at Form IV, 30% at Form V and 31% at Upper VI.
4. There is heavy reliance on private tuition, especially in the higher standards of the primary schools and at Forms IV - VI of the secondary schools. The system is both open to abuse and a heavy burden on poor families. Table 1 shows that as a proportion of total spending, expenditure on private tuition rises steeply with increases in total family spending. Thus a child from a poor family is likely to receive less teaching than one from a wealthier one. The Government has banned private tuition for children up to Standard III, and has taken measures to improve the conditions in which it is given. But the system remains inequitable.
5. There is a wide gap between the best and the worst schools at both primary and

secondary levels. A child attending a “low performing” school will have a poorer chance of doing well than one who attends a more successful school.

6. There has in the past been under-investment in certain sectors – and in particular in some private secondary schools and the University. There are deficiencies in the infrastructure of many schools. Many teaching aids are not generally available; some school libraries are inadequate; there is an insufficiency of health and other support services.
7. Steps have been taken to decentralise the system. Parents and Teachers Associations’ have been encouraged and helped. Teachers’ centres have been established. But the system is still insufficiently decentralised. In the administration of the schools, too many decisions are taken centrally. This makes for an inflexible system.
8. The system has not caught up with the changing needs of the economy. Thus there is an insufficiency of science and technical teaching in schools. There are major gaps in continuing education designed to update knowledge and skills.
9. The system is especially restricted at the tertiary level. Enrolment in higher education, while having increased substantially during the past quinquennium, is far less proportionately than in other countries at a similar level of development. A high proportion of young people goes abroad for their post-secondary studies. The lack of an adequate academic base at undergraduate



and post-graduate levels weakens the country's capacity for research and other forms of response to the changing economic, social and technological environment.

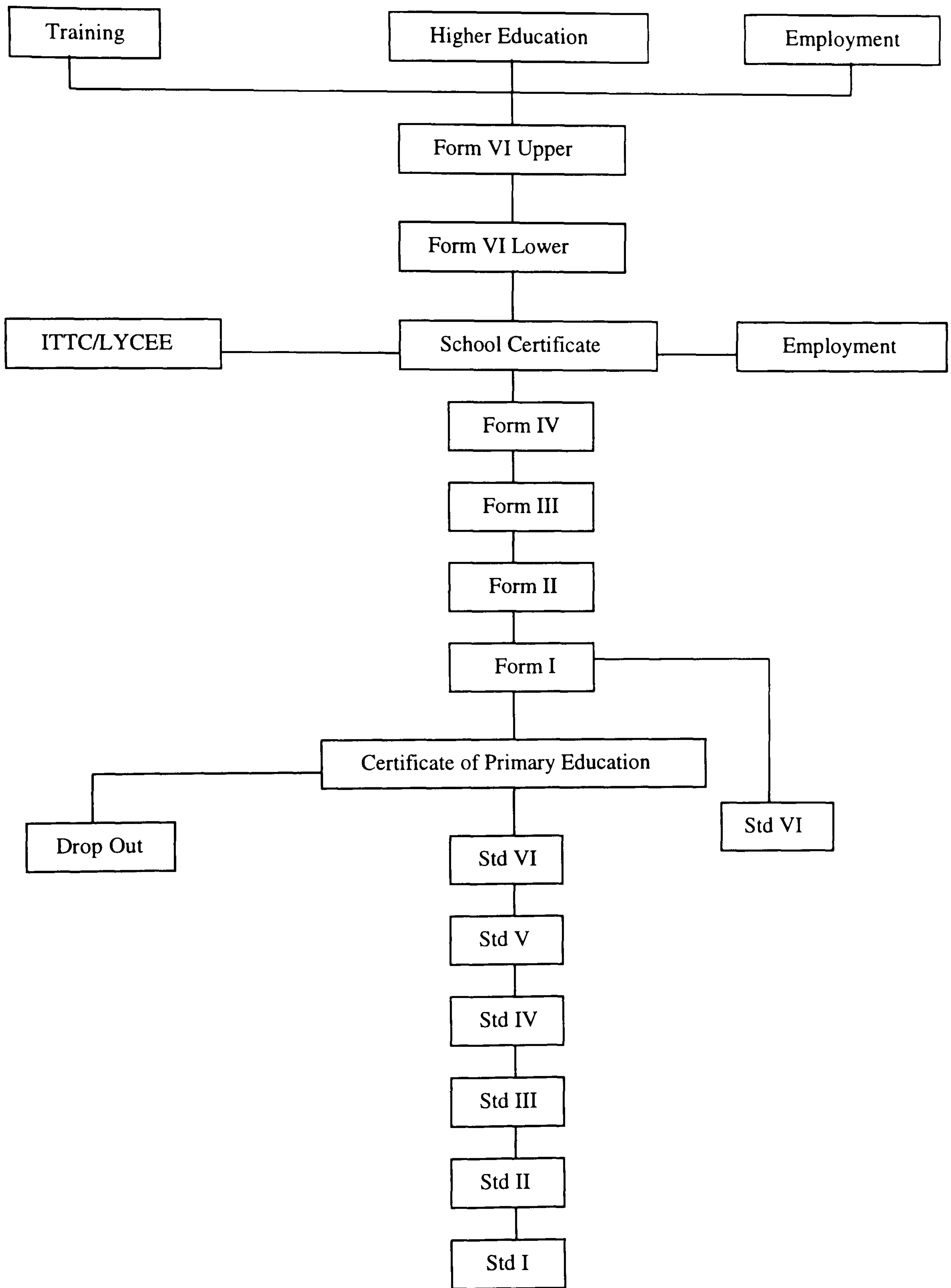
**Table 1: Spending on Private Tuition by Expenditure Class (1986-87)**

<b>Expenditure Class</b>	<b>Proportion of Total spending</b>
Less than 750	0.1
750 -1499	0.3
1500 - 2999	0.6
3000 - 4999	0.8
5000 - 8999	0.9
9000 +	0.6

*Source: Central Statistical Office, 1987*

The present structure of the school system is shown in Chart 1. The progress of pupils through the system is shown in Chart 2, based on promotion and retention rates in 1990. This shows that out of every 1000 children entering the system, 971 reach standard VI, 734 pass the CPE, (this includes first and second sitting), 445 reach Form V, 276 pass the School Certificate and 75 pass the Higher School Certificate. The Chart does not cover tertiary education, because of the lack of detailed information on Mauritians studying abroad. But enrollment in undergraduate and graduate studies in Mauritius is equivalent to less than one per cent of those who pass through the system.

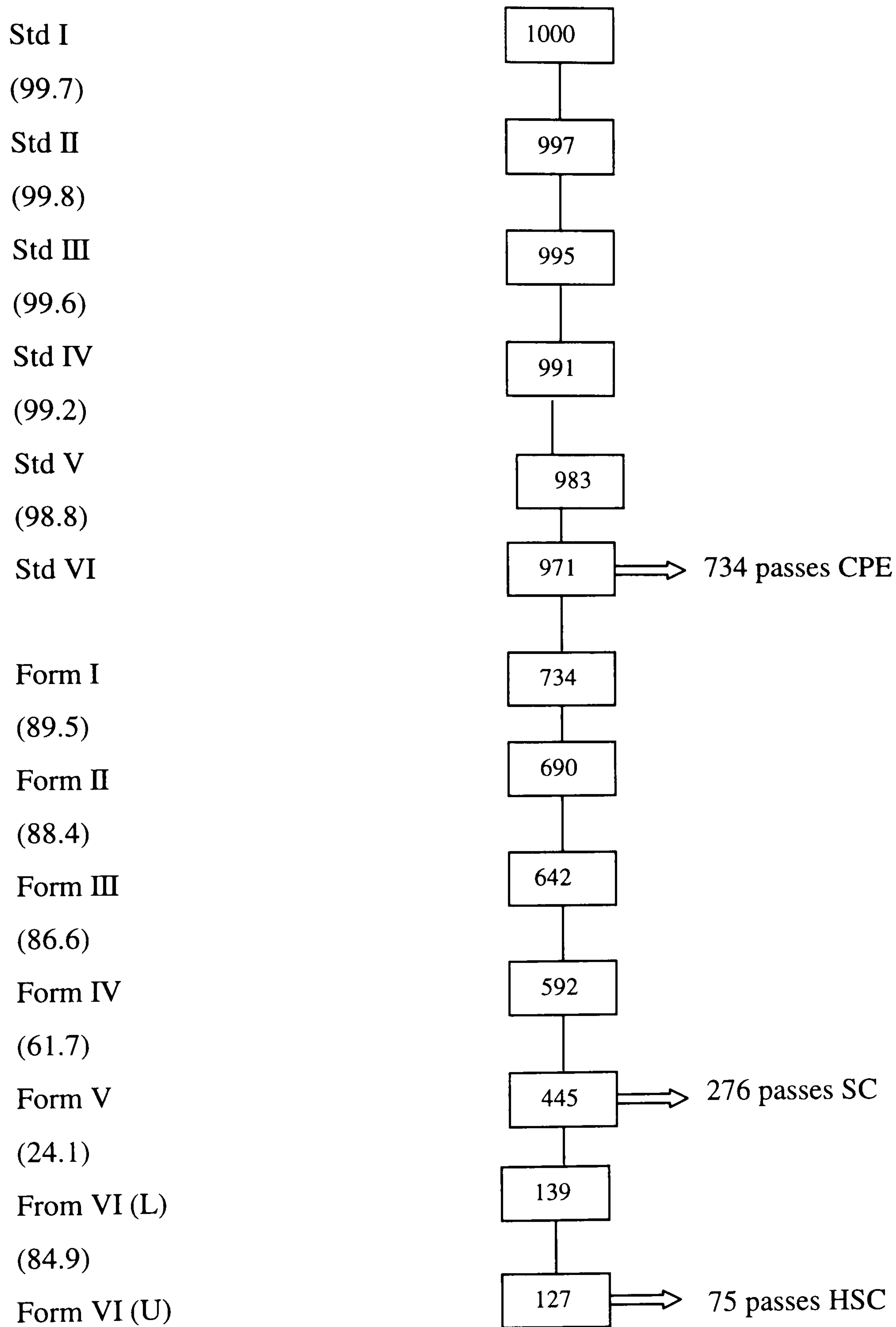
**Chart 1: Structure of the School System**



*Source: Master Plan for Education (2000)*

**Chart 2: Flow of hypothetical cohort entering Standard 1 in 1991**

*(according to the present system of education)*



Note: The figures in brackets represent the promotion rates used

*Source: Master Plan for Education (2000)*



### **1.3 Primary Education**

Primary education in Mauritius is free and around 98% of children complete the full six years (Standard I to Standard VI) from age five to eleven. Most children attend State schools, although there are schools that are operated by the Roman Catholic Education Authority and the Hindu Education Authority with the aid of the Government. In 1994 there were 279 primary schools that were located across all the districts. In 1994 a total of 5,483 teachers in these schools served a total of 123,167 pupils making an average pupil - teacher ratio of 32 across the Republic of Mauritius as a whole.

Table 2 gives the projection for pupil numbers in primary schools in Mauritius until the year 2002. These statistics clearly show that the size of the primary - age population is falling steadily.

Table 3 gives a number of input, process and output indicators relevant to the current quality of primary education in Mauritius. What the figures show is the low pupil - teacher ratio, widespread provision of books and audio-visual learning aids and the existence of Parent Teachers Associations in every school.

**Table 2: Projection of Primary Pupils by Std under the Present System (1991 - 2002)**

YEAR	STD I	STD II	STD III	STD IV	STD V	STD VI	STD VII	TOTAL
1991	18081	18430	19015	20179	21708	22517	11308	131238
1992	17919	18027	18393	18939	20018	21447	11191	125934
1993	18782	17865	17991	18319	18787	19777	10659	122180
1994	19961	18726	17830	17919	18173	18562	9829	121000
1995	20266	19901	18688	17758	17775	17954	9225	121567
1996	19483	20205	19861	18613	17616	17562	8923	122263
1997	18446	19425	20165	19782	18465	17405	8728	122416
1998	17683	18391	19386	20084	19624	18243	8650	122061
1999	17268	17630	18354	19308	19923	19388	9067	120938
2000	16928	17216	17595	18280	19154	19684	9636	118493
2001	16346	16877	17182	17524	18134	18924	8738	113770
2002	15787	16297	16843	17113	17384	17917	9405	110746

*Source: Master Plan Implementation Review Workshop April 1994*

**Table 3 - Primary School Indicators (1994)****Input**

No. of schools	279
No. of classrooms	4 405
No. of sections	3 773
No. of pupils	123 167
No. of pupils per section	33
Percentage of schools having:	
- library and reading room	67
- radio cassettes	99
- television sets	97
- video cassette player	97
Provision of free text books to pupils (%)	100
No. of library books	131 130
Books per pupil	1.1
No. of teachers	5 483
Pupil/teacher ratio	32
PTAs in schools (%)	100
<b>Process</b>	
Promotion rate (%) - Std V	99.9
Drop out rate (%) - Std V	0.1
Repetition rate (%) - Std VI	26.5
Pupil's rate of absenteeism (%)	10.0



Teachers' leave of absence (%)	4.0
Working days	180.0
Output/Enrolment rate	108.0
PTA's Contributory share (RS Mn)	4.7
Govt. Primary Schools	2.9
Aided Primary Schools	1.8
<b>Certificate of Primary Education (CPE)</b>	
English	68.1
French	76.8
Mathematics	71.7
EVS	69.4
Overall CPE pass rate (%)	61.2

*Source: Master Plan review conference 1995*

#### **1.4 The Certificate of Primary Education**

The Certificate of Primary Education (CPE) examination is a national examination that is organised and conducted by the Mauritius Examinations Syndicate. It was established in 1980, in replacement of the Primary School Leaving Certificate and the Junior Scholarship Examination which were considered to be traumatic since 10/11 year old children were required to sit for these two examinations within a period of one month. The CPE has two major functions. Firstly, it certifies and selects those pupils who will proceed to secondary schools, and secondly it ranks the top 2500 girls and top 2500 boys to determine who will be admitted to the schools for which there is greatest demand and determines which pupils will go to which school.

Despite the infrastructure being well resourced, the Government is very concerned with the failure rate in CPE and, in some schools, high levels of both pupil and teacher absenteeism.

Some of the other weaknesses identified in the system are as follows:

1. The schools, and especially the higher standards, are excessively geared to success in the CPE. Thus, many of the functions which the schools should perform take second place, and there is frequently a tendency for non-examinable subjects to be squeezed out of the curriculum. There is strong pressure on pupils - especially in standards V and VI - to take private tuition.
2. There is a wide gap between the highest and lowest achieving schools in terms of success in the CPE. Thus in 1990, 52 schools had pass rates in the CPE of 70% or more, while 15 schools had pass rates of less than 30%. There is a "hard core" of schools which normally obtain poor results.
3. The CPE itself selects children for entry into secondary schools and allocates them between the more and less popular colleges. But it is an inadequate indication of the child's abilities.
4. The curriculum is excessively rigid, and makes insufficient allowance for children of different abilities.

5. The combination of automatic promotion with a lack of remedial assistance for slow learners means that children who fall behind are likely to remain behind.
6. There are deficiencies in the provision of support services, teaching aids and equipment. Standards of maintenance are generally unsatisfactory. There is no programme for the regular maintenance and repairs of school buildings, furniture and equipment; thus repairs and maintenance are frequently delayed.
7. There has in the past been insufficient provision for in-service training for teachers.

*Source: Master Plan for Education (2000)*

At the present time, automatic promotion from one Standard to another masks a significant level of failure which becomes apparent at the end of primary schooling when the CPE examination is taken. In 1998 the overall percentage pass rate was 67.0% (comprising with 71.2% pass rate in English, 79.2% in French, 74.1% in Mathematics and 70.9% in Environmental Studies). Around twenty-seven per cent of pupils repeat Standard VI in order to try and improve on their results. Chart 2 sets out the pattern of drop outs at each stage of the school system.



## Table 4 - Certificate of Primary Education Results

(1994 - 1998) (School Candidates only)

YEAR	1994	1995	1996	1997	1998
No examined	29535	27733	25629	25230	24804
No passed	18075	18110	16736	16450	16622
% Passes	61.2	65.3	65.3	65.2	67.0

*Source: Examinations Statistics, 1998*

These variations reflect differences in both the socio-economic characteristics and the ethnic balance of the population in different areas, and the concentration of so-called 'five-star' schools with the best results in the urban areas where there is a higher concentration of educated and aspiring parents. Significantly, this situation of marked differences in the success rates of different schools is self-perpetuating as parents seek out ways of gaining entry for their children in 'five star' schools.

This pressure has led to some schools initiating selection mechanisms for entry to Standard I. Furthermore there are significant regional variations in the success rate, from 45.5% in Black River to 71.6% in Plains Wilhems in 1998 (Table 5).

**Table 5: Analysis at CPE, District-wise for 1987, 1996 - 1998**

District	1987	1996	1997	1998	% difference of 1998 over 1987
Port Louis	58.1	63.4	63.9	62.3	+ 4.2
Pamplemousses	42.4	57.5	59.3	58.0	+ 15.6
Rivière du Rempart	43.6	61.0	63.0	62.5	+ 18.9
Flacq	45.0	63.4	64.9	65.5	+ 20.5
Grand Port	51.5	67.5	63.4	62.2	+ 10.7
Savanne	50.0	68.3	65.3	68.9	+ 18.9
Black River	32.2	47.5	46.5	45.5	+ 13.3
Plaines Wilhems	64.2	73.5	72.8	71.6	+ 7.4
Moka	49.0	61.6	65.8	66.2	+ 17.2
Rodrigues	34.3	56.0	50.8	57.4	+ 23.1

*Source: Examinations Statistics, 1998*

### **1.5 Master Plan for Education (2000)**

In the light of the weaknesses in the CPE system, a "Master Plan for Education" was drawn up by the Government of Mauritius and the document was published in 1990. This Plan, which followed on from the 1984 White Paper on Education, provided a comprehensive and explicit set of goals for education in Mauritius and these were as follows:

- An agreed standard of basic education for every child. The principal means of doing so was the nine-year schooling system.
- Improvement of the quality of education at all levels. This implied accelerated in-service training of teachers, the establishment of minimum standards of infrastructure, and the adoption of appropriate assessment and examination systems.
- Reduction of inequalities in the educational system by improving standards in low-achieving schools.
- Development of the different abilities and aptitudes of those passing through the system to the fullest practicable extent.
- Promotion of the most effective use of resources by the management and structure of the educational system.

Among the particular objectives that the Masterplan highlighted for primary education which are of particular relevance to this research are:

- encouragement of a more relevant and flexible curriculum to meet the different needs of different children.
- the identification of Essential Learning Competencies (ELCs) and Desirable



Learning Competencies (DLCs) to ensure that such different needs are met.

- the broadening of the curriculum beyond CPE requirements, including the provision of co-curricular activities.
- the redesign of the CPE examinations such that 'pass' represents the achievement of the ELCs identified for Standard VI and includes a measure of teacher assessment.
- improving the qualifications and professionalism of the teaching force. It was envisaged that particular curricular and assessment strategies would help to meet such goals.
- Under the CARE (Continuous Assessment and Remedial Education) project, children progress was regularly assessed. There was a special assessment at Standard III. Some of those who fell seriously behind followed an 'extended stream' and were given four years to complete CPE instead of three. Alternatively they were allowed to repeat Standard III, or were given remedial help in the normal stream.
- Schools were helped and encouraged to adapt the curriculum to suit slow learners and high-flyers.
- The CPE was revised. It identified those children who had reached minimum

standards, and took account of the child's school performance.

- Special help was given to those schools which normally obtained poor results in the CPE. The size of remedial classes was restricted to 30. Teachers were trained in remedial work. The inspectorate were given special support to these schools.
- In-service training courses were planned for all primary school teachers. Every teacher had the right to regular re-training in the course of his or her career.

The aim of primary education, therefore, was to contribute towards the development of the intellectual and psycho-physical abilities of pupils so that, independently of social origin and sex, they had the possibility to develop into an integrated personality. All these are some of the ideas which were prevalent in the 70s and 80s (Jasman, 1987).

The plan also made a commitment that all children have at least nine years of schooling. Those who passed the CPE went on to secondary school, as at present. Children who failed the CPE twice attended a three-year course at a basic secondary school. The basic secondary schools were envisaged as having two functions. Firstly to ensure that as many children as possible reached the standards of essential basic education and secondly to provide their pupils with a grounding in practical skills and knowledge. At the end of basic secondary school, pupils received Certificates of Competence.

The introduction of nine-year schooling had a significant bearing on the design of an assessment scheme by reducing some of the pressures on the CPE. Not only did it relieve the pressure on some primary school children and lessen the need for private tuition, it was also a first step in releasing the primary schools from the worst effects of the CPE stranglehold.

The Master Plan provided the broad rationale that lay behind the desire to implement provision for Continuous Assessment in primary schools. The aim was to provide a system of continuous assessment that will:

- complement the functions of the well-established examination structure;
- enable achievements to be assessed that cannot be evidenced in conventional, unseen, written examinations such as oral skills, problem-solving or practical skills, so reducing the undesirable emphasis on rote-learning of specific content to which the current system leads;
- provide for the inclusion of information concerning personal and social skills and achievements which relate to the broader goals of education as set out in the Master Plan;
- reduce the currently high levels of failure at CPE and by implication, at earlier stages of the primary cycle by providing for diagnosis of individual learning difficulties and hence for appropriate remedial action to be taken by teachers.



To introduce and successfully implement Continuous Assessment, teachers had to familiarise themselves not only with the purposes of assessment but also with how to conduct this kind of task and what to assess.

This study will be interesting in the sense that it will give an indication of what teachers are already aware of in terms of assessment activities.

The data which were collected by interviewing/observing a number of classroom teachers might clarify these issues.

## **1.6 Teacher Education**

Teacher Education is undertaken by the Mauritius Institute of Education, which is the national body responsible for planning and administering programmes of teacher education at all levels. The MIE has its origin in the training of secondary school teachers, but it has diversified into the primary field since 1983. It collaborates with the Mahatma Gandhi Institute in the running of courses for teachers of Asian Languages, with the University in the mounting of a Bachelor of Education Course, and with the inspectorate of the Ministry of Education, in the running of primary school teacher training programmes.

Formal teacher education starts with the primary school sector. It comprises a two-year full-time pre-service course leading to a Teacher's Certificate in Education. Initiated in the 1940s, this programme was the only one available in the primary sector up to 1990. The programmes of long term in-service education

in operation to-day are mainly meant for secondary school teachers so as to improve their academic and professional qualifications. These programmes, which have been established since 1975, are:

- (i) a two year part-time Teacher's Certificate in Education;
- (ii) a three year part-time Teacher's Diploma in Education;
- (iii) a two year part-time Post Graduate Certificate in Education (PGCE).

In 1989, a three-year part-time Bachelor of Education Programme was launched. In addition to these formal award courses, there is also a system of short-term in-service education programmes generally for orientation purposes. Courses in Educational Administration are also organised for heads of schools who are expected to become better managers of educational institutions. It will be interesting to find out whether trained teachers have the skills to assess the primary pupils.

The Master Plan for Education (2000) identified four main objectives in the pursuit of a qualified and appropriately-trained, professional teaching force.

These were to:

1. improve the skills, efficiency and knowledge of teachers in academic and professional areas;
2. produce trained teachers in sufficient numbers to meet the requirements of schools at all levels within the education system;
3. encourage professional growth as well as professionalism;

4. consolidate the infrastructure for teacher education.

The number of teachers served by MIE on the different courses has increased from 626 in 1990 to 2564 in 1994 (Table 6). The Table also shows the growth in the in-service PGCE course and in the Advanced Certificate for practicing teachers to upgrade their skills.

Thus as Table 7 shows, the Government of Mauritius has made steady progress in raising the level of qualifications of its teaching force such that presently 58% of primary teachers have extra qualifications and only 22% of secondary teachers can be categorised as unqualified.

However, there are still significant problems to be overcome. These include release of teachers from school to attend courses at MIE, teaching using distance education materials and the need for an ongoing process of quality assurance for all programmes. The need for staff development is now pressing, as changing educational priorities require new knowledge and teaching techniques to be incorporated into courses.



**Table 6: Enrolment by Type of Course at Mauritius Institute of Education  
(1990 - 1994)**

YEAR	1990	1991	1992	1993	1994
Post Graduate Certificate in Education	102	98	134	133	119
Bachelor of Education	-	55	55	-	-
Teacher's Diploma	103	68	110	205	194
Teacher's Certificate (Secondary)	-	181	173	83	83
Advanced Certificate in Education for Deputy Head Teacher	-	41	36	122	135
Teacher's Certificate (Primary)	321	673	647	1454	347
General Purpose	-	566	545	1230	320
Asian Language	-	107	102	224	27
Advanced Cert. in Ed. for teachers:					
Total	-	669	339	664	1470
General Purpose	-	618	299	624	1246
Asian Language	-	51	40	40	224
Physical Education	-	-	-	-	36
Retraining Course (MGI)	17	12	-	-	-
Proficiency Course in P/Education	41	30	-	-	-
Teacher's Cert. Course (Pre-primary)	19	-	-	-	91
Certificate in Ed. Administration	23	-	-	-	89
Total	626	1827	1494	2661	2564

*Source: MIE, 1994*

**Table 7: Key Monitoring Indicators (1991-1994)**

Improving Quality and Efficiency	1991	1992	1993	1994
	Actual	Est.	Actual	Est.
% of Qualified Primary Teachers	35	35	35	58
Reduce % of Secondary Teachers Categorised as 'C'	46	30	40	22

*Source: MIE, 1994*

One area that has been of persistent concern during the last decade, and one that is closely tied to the subject of this research, is the need to train teachers in continuous assessment and remedial education. A programme of Continuous Assessment and Remedial Education (CARE) was envisaged in the Master Plan following the recommendations of earlier consultancies (see, for example, Irving, 1989). It was envisaged that suitable teachers would be given a one-year training course and then work with small classes of slow learners with a view to improving these pupils' level of achievement.

### **1.7 Textbooks and Teacher Manuals**

All textbooks are prescribed by the Ministry of Education. For each subject, a teacher's manual is provided which determines the learning objectives for each unit. The teacher is obliged to follow these guidelines and ends up with little flexibility to implement innovations (Master Plan for Education, 2000).

In practice, however, the reality is different. On the one hand, inspectors

continuously check for the accurate application of the official guidelines while teachers, on the other hand, strive to keep their professional autonomy by following sometimes, either traditional methods of assessment or by trying innovations as they believe them more effective for their pupils' progress.

As far as assessment is concerned, the new books embody, at the end of each unit, exercises and tasks which pupils have to work on during the teaching session and which the teachers have to supervise and provide individual assistance to pupils.

All the previous comments are closely connected with the study, since textbooks and teacher manuals are the basic tools of everyday instruction and therefore affect classroom assessments. The assimilation of textbook ideas and objectives is in the final analysis the task of assessment. It is of importance, therefore, to see their impact on: teachers' assessment attitudes, practices, remedial measures, recording and reporting approaches and consequently their impact on children.

To what extent do teachers comply to the manual instructions? Does it lead to teaching uniformity? Do teachers apply traditional or progressive assessment types? The findings of this study could give some indicative answers to these questions.

A reference to the textbooks and teacher manual, teachers' socio-economic background and training, is also made since it was assumed that these are important factors that could influence teachers' beliefs and assessment practices.



In order to understand why classroom assessment operates the way it does, one has to consider all these factors which construct the context of the enterprise. This context is also considered for the interpretation of the present study's data.

How far teachers apply the official policies is another interesting issue for this study.

### **1.8 Teaching and Recruitment of Teachers**

One goal of the Master Plan was to raise the level of commitment of the teaching force, to widen the range of its skills and improve its adaptability so as to meet the demands of the economic and social development.

In 1994, in the island of Mauritius, there were 5292 primary teachers. About 80% of primary teachers were employed in Government Primary Schools and the rest in aided and non-aided private schools.

Teachers for Government primary schools are recruited by the Public Service Commission and are civil servants. The Roman Catholic Education Authority selects its own teachers, though teachers in these schools are paid and trained by the Government. Salaries and conditions of service are broadly similar across all primary schools. Some aspects of teachers' conditions of work are of considerable potential significance both to the specific issue of the introduction of Continuous Assessment and to the more general concern to raise the overall quality of teaching in schools.

### **(a) Headteachers**

One important issue is the role of headteachers. Traditionally headship has been achieved largely on the basis of seniority in the final few years of an individual's career. Thus headteachers are often not motivated to introduce change. Until recently they have also not received training for their leadership role, though this is now being addressed by a training programme being monitored by the International Institute for Educational Planning in Paris.

### **(b) Deputy Headteachers**

A second, related problem concerns the role of the deputy headteacher for whom there is no particular area of responsibility currently designated and who have again, traditionally been promoted on the basis of seniority. Although the Master Plan envisaged that both headteachers and deputy headteachers would be recruited on the basis of 'commitment, competence and sense of responsibility' and be trained in the management of schools, this has yet to be implemented.

### **(c) Staffing Policies**

A third issue concerns the practice of posting. Teachers in Government schools are appointed by the Ministry to individual schools and are transferred regularly. Teachers can find themselves working in a school which may involve a bus journey of over an hour. Headteachers are posted by the Ministry and can be moved to inconvenient locations at short notice. They have no control over the appointment or removal of particular teachers in their schools and so have little scope for building up a strong school ethos or collaborative working between teachers. Headteachers and deputy headteachers have traditionally been appointed



largely on the basis of seniority such that many only reach this position shortly before retirement.

These arrangements for the employment and posting of teachers are likely to prove a significant barrier to improving the quality of teaching provision in schools since they reduce the possibility for headteachers to exert strong leadership in their schools. Equally they are likely to reduce teachers' sense of commitment to a particular school and their willingness to invest time and energy in its development. The recent successful experience of the 'Project schools', in which it has been policy not to move key staff, testifies to the Ministry of Education's recognition of the desirability of greater stability in school staffing if initiatives aimed at raising the overall quality of classroom provision are to be successful. The implementation of any new approach to the making of teacher appointments is likely to prove difficult, however, since the teacher unions are opposed to a reduction in a classroom teacher's right to move schools on a regular basis. They are also opposed to moves away from the use of the criteria of seniority in headteacher and inspector appointments.

The teaching force is increasingly well-trained but substantial difficulties remain to be overcome in the creation of a professional cadre with the skills and attitudes necessary to provide all the children of Mauritius with an education that is appropriate to both their needs and those of a changing economy and social structure. The education system continues to serve well the intellectual elite for whom it was originally designed. The legacy of extreme competition and a narrow academic focus which is the result of this tradition is not now felt to be



appropriate for the more comprehensive levels of success that Mauritius now seeks for its population.

It is with a view to achieving this goal that the Government of Mauritius introduced a more broadly-based curriculum during the course of primary school; more comprehensive certification at the end of primary school and a measure of Continuous Assessment to encourage teachers to respond appropriately to pupils with different learning needs. In order to maximise the chances of success in this respect, it is useful to consider some of the lessons to be learned from previous attempts to introduce Continuous Assessment in Mauritius, as well as those that can be learned from the experience of other countries which have sought to introduce similar changes.

### **1.9 History of Continuous Assessment in Mauritius**

The need to review the system of examination was felt by the educationists and policy makers since the publication of the Mauritius White Paper (1984) on education. The White Paper emphasized the need for regular assessment of literacy and numeracy throughout the child's school life so as to provide for remedial treatment for those children who fall behind in their studies. The Master Plan for Education (2000) again highlighted the role of Continuous Assessment in appraising the whole child and recognizing it as a complement of the Certificate of Primary Education. Accordingly, the general structure of the educational system was modified so that a system of regular and comprehensive assessment was introduced into the primary schools. Under the Continuous Assessment and Remedial Education (CARE) project, children who were falling seriously behind

were identified. In the light of an assessment at Standard III, such children were, with the agreements of their parents, directed towards an 'extended system' which provided four years of schooling leading to the CPE, instead of the normal three years. Some children were encouraged to repeat, or received special remedial assistance in the normal stream.

The Blue-Print of Nine Year Schooling (1992) brought out by the Ministry of Education and Science, had more forcefully stressed the role of Continuous Assessment to develop a parallel system of Assessment in schools to prepare pupils for the CPE examination to be based on learning competencies already worked out by the Mauritius Examinations Syndicate for Standards IV to VI. These competencies or attainment targets which are listed as Essential Learning Competencies (ELCs) and Desirable Learning Competencies (DLCs) encompass both cognitive and non-cognitive development vis-à-vis assessment of the learner.

The rationale behind the Nine Year Schooling, as far as Continuous Assessment was concerned, was to "design a new form of assessment which encouraged teachers to implement the defined instructional objective, to use a wide variety of teaching methods and to motivate pupils in the learning process."

Despite successive attempts to introduce Continuous Assessment since the early 1980s, each successive initiative failed although a lot of planning and effort went into it. Thus, in 1989 there was a launching ceremony for the Continuous Assessment project based on a programme of action for its implementation. Although the programme was extremely detailed and carefully planned, it failed



to make an impact on the Mauritian primary schools.

Among the reasons why it was not successful were:

1. Inadequate training in Continuous Assessment procedures. The briefing session to launch the project was definitely too short to enable teaching and administrative staff at the implementing end to have a firm grounding in the Continuous Assessment procedures;
2. Movement of teachers in pilot schools;
3. Failure to monitor the project - Some Standard I teachers were unwilling to trial out the scheme. Also a few inspectors were simply not in a position to monitor consistently because of their numerous constraints;
4. Lack of uniformity in the assessment procedures;
5. The recording of unreliable data;
6. Absence of co-ordination among subject evaluators.

*Source: MIE, 1984*

Prior to the launching of the Continuous Assessment project, the Primary Curriculum Development Project, based at Mauritius Institute of Education published a detailed set of papers documenting how Continuous Assessment was introduced for each of the areas of the primary curriculum. The document gave the history of Continuous Assessment in Mauritius as going back to 1981 when the Ministry of Education set up a committee to consider the form in which pupils performance in the lower classes of primary schools can best be achieved.

Baumgart and O'Donoghue (1989), in "Improving the Quality of Education in



Primary and Secondary Schools: A Draft Plan to Improve the System of Assessment and Examinations in Mauritian Schools", placed considerable emphasis on strengthening teachers' professional skills in assessment and the introduction of a programme of diagnostic assessment and remedial education from Standard III upwards building on the existing Continuous Assessment Project.

Vasishtha in "Reckoning of Continuous Assessment for CPE Examination: Theoretical Perspective" (1989) again stressed the point that "In the end the success of a system of Continuous Assessment depended on the teachers, their understanding, training, potential, honesty, unbiased attitudes and, above all, the 'professionalism' they brought to the work of teaching-learning and testing".

Other reasons for failure can also be identified. A 1989 paper by the Government Teachers' Union identified a wide range of problems, notable among which were the time and resources in school to help teachers implement those new practices, a lack of appropriate external support; and a punitive, rather than collaborative approach from the external agencies that were available; hostility from parents fearing that higher-achieving children were being neglected; a lack of training to facilitate the implementation of 'CARE' in large classes and across subjects associated with a lack of detailed preparation and guidance; a lack of a sense of 'ownership' of the scheme by teachers.

Thus for the implementation of a Continuous Assessment scheme in Mauritius to be more than simply another way of collecting evidence concerning learning

outcomes, to be instead a means of helping teachers to respond more effectively to pupils' different learning needs, the scheme had to address first and foremost how to change the attitudes and traditions that lie behind current practices of teaching and assessment. In particular the management of change needed to be such that teachers acquire:

- an understanding of the ways in which assessment was used to support learning
- a willingness to differentiate between individual pupil's learning needs in teaching provision
- a willingness and ability to respond to these needs with appropriate curriculum interventions
- a belief that the performance of over-achieving children can be enhanced with appropriate teaching.

In many Mauritian primary schools, there is a tendency to assume that pupils from socially-disadvantaged backgrounds will not achieve-either through their perceived innate lack of ability or because of a lack of parental support. However the experience of the 'Project Schools' made it clear that significant increases in performance levels can be achieved for children who may lack the advantage of a particular kind of home background. The policy intention to extend the Project School strategy to all primary schools in Mauritius, testifies to the recognition on the part of the Mauritian Government that standards of performance can be improved in all schools if the above criteria are fulfilled, such that teachers become committed to exploring the possible potential of new approaches to



teaching and learning.

The experience of the project schools also made clear the need for:

- an external framework of expectations and support;
- a whole - school approach to implementing change including strong leadership by the headteacher;
- appropriate professional development for teachers and headteachers;
- active involvement of parents;

The lessons to be learned from the 'Project Schools' initiative in this respect are similar to that of many other similar initiatives and are borne out by international research evidence concerning the key ingredients of successful attempts to implement whole-school change.

### **1.10 Lessons from other Countries**

Similar dimensions have been found elsewhere to characterise the management of change in assessment. In England, for example, the National Evaluation of Pilot Record of Achievement Schemes (Broadfoot, et al., (1988) found that the successful implementation of a broadly-based Continuous Assessment and recording scheme depended on:

- a sense of 'ownership' on the part of the whole school-teachers, parents, pupils, Governors and the local community in general;



- ‘penetration’ of the initiative into every aspect of school-life;
- training for teachers and pupils, as well as awareness - raising for parents and the local community;
- the perceived credibility of the initiative with potential users of the information;
- the perceived commitment of external bodies - especially the Government to the importance and success of the initiative;
- the provision of necessary resources in terms of teacher-time and materials;

### **1.11 Recent Assessment Developments**

Having achieved the first goal of universal education at primary, secondary and tertiary levels, it was the felt need of successive governments to improve the quality of education to ensure that all the children irrespective of social, regional and economic background are given quality education and helped to develop their abilities and the basic life skills and competencies necessary to function in the present society.

And it is in this context that two major assessment projects namely, the introduction of Essential and Desirable Learning Competencies and the Continuous and Comprehensive Evaluation Scheme, were introduced by the MES in 1992.

#### **1.11.1 Introduction of Essential/Desirable Learning Competencies**

Essential Learning Competencies (ELCs) and Desirable Learning Competencies (DLCs) were introduced in 1992 with five objectives in mind, in particular to:

- identify the basic skills and learning competencies needed by children to become literate functional citizens;
- provide direction for curriculum developers to develop competency - based instructional materials;
- provide broad guidelines to teachers to adapt teaching learning strategies to the learning competencies;
- redesign the examination papers in terms of the learning competencies;
- provide a basis for certifying pupils' achievement.

#### **(a) Pedagogical Basis**

While it was necessary and desirable to get the majority of pupils to pass the CPE examination, one major pedagogical concern was to improve the performance of pupils to bring them all up to a reasonable attainment level-to make them literate and numerate.

By setting clearer and step-by -step attainment targets (expressed in terms of Essential and Desirable Learning Competencies), there was an inbuilt mechanism for more effective teaching. There was also a clearer sense of direction in the day-to-day teaching, so that teachers might know step-by-step what they were expected to achieve and could discover/diagnose at what step a child was facing difficulties.

#### **(b) Definitions of Essential and Desirable Learning Competencies**

Essential Learning Competencies (ELCs) represent the levels of learning in a



particular subject comprising such basic knowledge, understanding, skills, abilities, interests, attitudes and values which are considered minimum but essential for all pupils to acquire at the end of a particular standard or stage. They are regarded as attainment targets below which learning is not sustainable. In other words, they are the 'minimum vital'.

However, because children do not all have the same potential and while it was necessary to bring all children up to the agreed-upon essential level of learning, children with higher abilities had to be catered for and attainment levels were pitched higher to meet their learning needs. Therefore, higher order competencies involving more complex mental processes and/or learning content were laid down and termed Desirable Learning Competencies (DLCs). The ELCs are a must for all pupils while the DLCs are optional though desirable, for every one to exercise his/her higher mental faculties and can thus be used to discriminate amongst high flyers.

It will be interesting to find out which competencies are being assessed. Also, are the pupils with higher abilities catered for? And what do teachers do when there are pupils of higher and lower abilities in their class?

### **(c) Methodology used to Formulate Learning Competencies**

The first step in the project was to analyse the present syllabuses and question papers and to study the international literature on competency-based teaching and testing. The analysis showed that different models had been used in different countries. Basic skills testing programmes are used in Australia, where the skills



tested include two aspects of literacy (Reading and Language) and three aspects of Mathematics (Number, Measurement and Space) and where the scores represent growth along a continuum. In some Australian states, profiles have been developed within subject areas and each component is further divided into levels of competence representing standards of performance.

England and Hong Kong have specified “Attainment Targets” with criteria set at a number of different levels rather than pass/fail at only one level. The USA have minimum Competency Testing and India developed the Minimum Levels of learning.

The MES chose a taxonomic model which stated learning objectives in terms of: Knowledge, Understanding and Application for content subjects and Knowledge, Comprehension, Expression (which included Application) in the case of Languages.

The second step was to break down each subject into its major skills and the competencies implied in Language subjects or content areas and the corresponding competencies. Thus learning competencies were laid down for each subject examined at CPE level, giving due importance to certain skills presently neglected and overlooked which are yet essential components of the subject, e.g. the oral skills in Languages and the psychomotor skills in Environmental Studies. Consideration had not only been given for some of the non-cognitive elements like attitudes, values that are important for the development of competencies in individual subjects but also for the healthy

growth and integration of the child in society.

The third step was the categorisation of the Learning Competencies into the two groups: Essential and Desirable. Essential Learning Competencies constitute the levels of achievement to be developed in all children at the end of the primary stage while Desirable Learning Competencies set the attainment levels for children with a higher ability.

#### **(d) Strategy for Formulating Learning Competencies**

To develop the lists of Learning Competencies, the MES adopted a participative strategy. Subject working groups comprising curriculum developers, chief examiners, inspectors, headteachers, deputy headteachers, practicing teachers and research officers were constituted to work out the Learning Competencies in each subject. A Steering Committee was also set up to monitor the progress of the panels.

#### **(e) Criteria**

The following criteria were applied to judge whether a Learning Competency formulated was acceptable for inclusion in the list.

1. It had to be sustainable in the sense that it represented achievement which can sustain learning from one unit to the other and from one standard to the next, so that pupils can derive benefit from instruction for further learning.
2. It had to be communicable which meant that the levels of learning stated form



a common basis for the teachers, evaluators, inspectors and administrators.

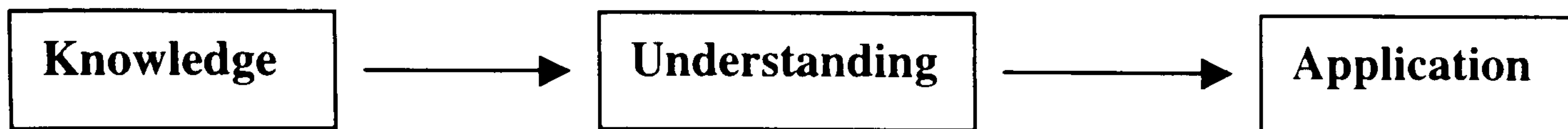
3. Attempts were made to: (i) provide learning continuity in each topic and sequence in such a way that clusters of competencies of a unit were built upon the clusters of competencies of the preceding unit and (ii) develop a continuum of learning competencies as far as possible across standards 4 to 6 besides the learning continuum established within each standard.
4. The criterion of functionality was used. It meant that teachers were capable of developing those competencies in teaching. Learning Competencies were stated at a proper level of generality, neither too global to be measurable nor so atomistic as to be unwieldy.
5. Unless a learning competency was measurable/testable, it was not to be listed. A learning competency had to provide a well defined goal, where a statement in terms of specific learning outcome was necessary, to make it testable.
6. Achievability was the final criterion which meant that under the given conditions all learning competencies were attainable. They were in accordance with the cognitive development and the maturity levels of pupils.

**(f) Why the hierarchical presentation?**

All the competencies were presented in a hierarchical way both across standards and more importantly within each standard. The reason was that learning objectives had an intrinsic hierarchy which was reflected in both content and



competencies, as a result of which we had a hierarchy of competencies and a hierarchy of content.



Logically we cannot expect a child to multiply until he/she understands the principle of addition; likewise we cannot expect him/her to write a sentence correctly in a particular language until he/she has mastered certain syntactical and grammatical structures of the language and has the required vocabulary. This hierarchical nature of the competencies listed had a direct implication for teaching: given their hierarchical nature, a competency cannot be taught unless the preceding one had been acquired. Teachers, therefore, had to make sure - not necessarily through formal tests - that the pupils had acquired the prerequisite competency before they taught the next one.

With the introduction of Essential Learning Competencies (ELCs) and Desirable Learning Competencies (DLCs), the design of the CPE question papers had undergone a change. For each subject, the papers are in two parts. Part A of the paper, which carries 60% of the marks contains mostly questions testing knowledge and understanding objectives, while part B of the paper, which carries 40% of the marks, has questions testing understanding and application objectives.

There is a distinction between ELCs and DLCs and this is deliberately made to reflect the second function of the CPE which is that of selection for secondary schools. In 1994 there were 120 secondary schools in Mauritius catering for 87,177 pupils. Of these, 23 were Government schools and 97 Private schools. Of

these schools, the Government and the 'Confessional' schools are much sought after compared with private schools in which the quality of accommodation and the level of teacher qualifications are generally less good. Even within the Government and 'Confessional' schools, however, there is an explicit hierarchy so that, the long established Government schools such as Queen Elizabeth College for girls and the Royal Colleges for boys along with Loreto Convents of Port Louis and Quatre Bornes within the 'Confessional' schools are generally recognized as the top schools, with every other Government and 'Confessional' school being ranked below these.

### **1.11.2 Introduction of Continuous and Comprehensive Evaluation Scheme (CCE)**

In Mauritius, as in many other countries, there is a widespread consensus among educationists that it is desirable to have a measure of continuous assessment in the later stages of primary schooling. The main reasons were put forward in the key Government policy document issued in 1990. It argued that the present system was dominated by one end of cycle external examinations. This had a backwash effect on the curriculum. Moreover, the examination concentrated on examinable subjects to the detriment of co-curricular activities.

This study will present findings on whether pupils are still being assessed on examinable subjects or not.

Problematic features in primary schools included excessive 'cramming' by pupils as a result of pressure to do well in the terminal examination. This pressure was



exacerbated by the secondary school entrance ranking system which resulted, effectively, in a uni-dimensional hierarchy of school status. Other consequences included unwelcome constraints on the breadth of the primary school curriculum; an unhelpful emphasis on learning by rote and a lack of positive information about their achievements for those leaving school at the end of the primary stage.

Since the early 1980s, the idea of introducing a measure of continuous assessment had thus been in the air to help reduce the significance of the final examination, identify the pupils in need of remedial help in order to achieve a pass and to encourage a more broadly-based curriculum.

The Scheme of Continuous and Comprehensive Evaluation (CCE) as it is called in Mauritius, was officially launched in 1992. The scheme was confined to continuous assessment in the four core subjects – English, French, Mathematics and Environmental Studies.

The scheme, which was implemented in 1992, had both informal and formal components. The informal component included continuous evaluation of pupils in the classroom in the course of teaching, while the formal component included periodic tests, term examinations and also the annual examinations in which marking was done and records of marks were kept in a systematic manner. The evaluation scheme had elements of both formative and summative evaluation with the formative aspect being more prominent.

With the implementation of CCE, how familiar are classroom teachers in primary



schools with the conduct of assessment? Do they know why assessment is undertaken? What do they assess? The findings of this study could give some indicative answers to these questions. Also, it will be interesting to explore to what extent the recent reforms are being implemented and evaluated in the classrooms. The researcher's field notes from observing the classrooms and the assessment co-ordinator, discussions with the teachers and the responses from the semi-structured interviews might offer provide some answers to these ssues.

### **1.12 Overview**

This chapter briefly described the context within which the Mauritian education system operates, its framework and the social context. A reference was made to the main reforms which were implemented in 1992. The aims and the operation of the education system was also considered.

Although the school system has many positive achievements, like universal provision of primary education, free schools at all levels, total revision of the primary curriculum to take account of changing needs and current pedagogical practice and freely available textbooks, the system (according to the Master Plan for Education, 2000) faced important problems. In the light of the weaknesses, the system was revised to provide a comprehensive and explicit set of goals for education. The aim was to contribute towards the development of the intellectual and psycho-social abilities of pupils. It will be interesting for this study to find out if these abilities are taught and assessed and how.

A reference to the textbooks and teacher manual, teachers' socioeconomic

background and training was also made, since it was assumed that these were important factors that can influence teachers' beliefs and assessment practices.

In order to understand why classroom assessment operated the way it operated, one has to consider all these factors which construct the context of the enterprise. The context is also considered for the interpretation of the present study's data. How far teachers apply the official policies is another interesting issue for this study.

Overall, the review of the Mauritian education system indicates that the purposes of the recent reforms is summative as well as formative. Hence, it is interesting to see the implications of all these in classroom assessment operation given the summative and formative orientations of the context.

The most important change is the introduction of the Essential and Desirable Learning Competencies and the scheme of Continuous and Comprehensive Evaluation.

Some interesting points emerge from the education changes such as first, the importance of assessment as a continuing process, placing the onus on internal classroom affairs, i.e. on teachers' judgments built up from information gathered during classroom observations and regarding pupils' backgrounds. In addition, teachers have to concentrate on curriculum objectives and finally to take the appropriate remedial measures to aid pupils' learning and to inform parents.

All the above issues are related to the present study because they form the social and operational context within which this piece of research is carried out. and the data of this study are to be interpreted with reference to this context.

But before delving into the details of the study, it is necessary to review the pertinent background information, since such information will aid in planning this thesis in its proper and wider context.



## **Chapter Two: Review of Literature**

### **2.1 Introduction**

All research work should take into account previous work in the same area (Merriam, 1984). Ignoring prior research and theory chances pursuing a trivial problem, duplicating a study already done, or repeating others' mistakes. The goal of research - contributing to the knowledge base of the field - may then never be realized. The value of any single study is derived as much from how it fits with and expands on previous work as from the study's intrinsic properties.

There are several functions of a literature review. It interprets and synthesizes what has already been researched and published in the area of interest. It presents the state of the art with regard to a certain topic. Besides providing a foundation for the problem to be investigated, the literature review can demonstrate how the present study advances, refines, or revises what is already known. Finally the literature review can help in the formulation of the problem, in the selection of methodology, and in the interpretation of research results.

The literature review for this study is very much UK - oriented. There are two particular reasons for this. Firstly, the researcher is very familiar with the UK's material on educational assessment. Secondly, the Mauritian educational system is very similar to that of the UK system. A review and an understanding of the UK's educational assessment will, therefore, help the reader understand the findings of what goes on in the classes of Mauritian primary schools.

Conducting the literature review for this study meant searching for literature on

the relevant topic/theme for review. The next step was to check bibliographies, indexes, and abstracts that reference specific aspects of the topic. This was done with the help of the computer, resulting in the work being done with speed and a breadth of coverage not possible manually. Once a set of references and abstracts were collected, selection as to which full-length resources to be obtained and which resources to include in the review, was made on the basis of the following criteria:

- Is the author of the source an authority on the topic - one who has done the empirical work in the area or one who has offered seminal theory upon which subsequent research and writing has been based?
- When was the article or book or report written? As a rule, the most recent work in the area was included in the review.
- What exactly was written about or tested?
- What was the quality of the source? A thoughtful analysis, a well-designed study, or an original way of viewing the topic was taken to be a significant piece of literature.

After the selection of the resources, the next step in the process was to evaluate each piece of literature so that the end product is not only a critical review of the literature, listing or describing what has been written or researched but is also a narrative essay that integrates, synthesizes, and critiques the important thinking



and research on a particular topic (Merriam & Simpson, 1984).

In this literature review, the areas surveyed are those that are relevant to the main research questions addressed in this study. This is why the literature survey is organised into five main sections dealing with purposes of assessment, assessment practice, contents of assessment, teachers' response and finally, quality and improvement of assessments.

Section 2.2 reviews evidence on several assessment purposes that are closely related to the main interest of the study, i.e. the potentials of classroom assessment to assist teaching and learning. Firstly, a brief reference to the general assessment purposes is made. Secondly, the basic purposes of assessment aims in the classroom are explored. The importance of communication and diagnosis of children's strengths and weaknesses as a fundamental purpose of classroom assessment are also explored. The section also examines the most important purpose that classroom assessment has the potential to accomplish, i.e. fostering of children's motivation. Finally, the undesirable side-effects of assessment are looked at.

Section 2.3 deals with classroom assessment in practice. It aims to point out how complex the assessment process is, to outline current practice and difficulties of implementation, and to assist the interpretation of the study's findings. The section also examines the standards to which teachers refer in order to interpret the assessment evidence.



Section 2.4 examines the content of assessments, i.e. which qualities do teachers look for in their pupils? What sort of goals are considered as most appropriate? Are pupils and teachers clearly aware of the objectives that are pursued during a given teaching session?

Section 2.5 reviews the nature and forms of teachers' response to pupils' efforts, performance, or behaviour, which could be verbal or non-verbal, positive or negative, specific or general.

## **2.2 Why Assess Pupils in the Classrooms?**

### **2.2.1 Introduction**

'How important is assessment in the classrooms?' is a major question and is examined in the light of the research evidence concerning the intended purposes that assessment serves in the classroom.

Classroom assessment is a process of a formative nature aiming to assist teaching/learning. Teachers are always involved in diagnostic and formative assessment. This is mainly pursued through the realisation of purposes such as diagnosis, provision of feedback, mastery, remediation, motivation, communication and so forth. This section reviews evidence on the formative function of classroom assessment: the purposes it serves to assist learning, undesirable side-effects when assessment is not used properly and teachers' awareness of its potential. A review of the evidence in this section will enrich the reader's understanding about the variety of classroom assessment purposes and unintended side-effects, point out the importance of classroom assessment and the

necessity for teachers to be clearly aware of the purpose they pursue each time and also aid the interpretation of the study's findings.

### **2.2.2 General Purposes of Assessment**

The term 'classroom assessment' is used to express all the processes for collecting information, making interpretations and decisions based on the information on a daily basis in the classroom for the improvement of teaching and learning (Airasian, 1996). Since, one of the interest of this study is classroom assessment and the purposes it serves, this section very briefly refers to the general purposes of assessment.

A reading of the extensive literature reveals the variety and the complexity of the aims served by assessment. Among others, it aims to assess pupils' progress; maintain educational standards; provide feedback to teachers and pupils; evaluate teachers, teaching methods and schools; evaluate curricula and the effectiveness of the whole education system; offer certification and finally select pupils.

Several studies (Broadfoot & Osborn, 1987; Lee, 1989; Satterly, 1989; Broadfoot et al., 1991) point out that assessment affects teaching/learning by aiding curriculum, communication and accountability. According to Broadfoot (1987), assessment aims to aid three parties: (i) pupils - diagnosis of progress, strengths and weaknesses - guidance curricular and vocational motivation - from a sense of achievement, (ii) teachers - decisions about what needs to be taught; feedback on how effective teaching has been; feedback on class performance in comparison with other teachers and schools and (iii) consumers - fair selection and allocation



of opportunity (the meritocracy); feedback about the quality of a particular institution, monitoring of national standards; curriculum standardisation and control.

McArdle (1989) argues that prediction, selection and grading are the general purposes of assessment at school, although particular purposes are more applicable to some situation and types of schools than others. Assessment produces certificates of competence at a particular level. These certificates open the doors for placement in subsequent levels or careers (Broadfoot, 1979a, 1984; Satterly, 1989). The selection function of assessment, manifesting itself as a social phenomenon has also been widely investigated (Broadfoot, 1984; Sutton, 1985; Gipps, 1990; Rowntree, 1991).

Assessment aims at allocating pupils to different levels of schooling. This is an issue which is prevalent around the world (Lee, 1989; Satterly, 1989; Airasian, 1996).

Assessment is often used to exert control on those who are assessed, either overtly or covertly. The social dimension of the issue has been revealed by such studies as Broadfoot, 1979, 1984, 1990 and Gipps, 1990. According to Broadfoot (1990), assessment provides a vehicle for control of individual aspirations and frustration through the legitimation of apparently objective educational judgments and also of the message producing system itself through the broader control functions embodied in procedures for teacher institutional assessment and accountability.



Harlen (1990) shows the evaluative function of assessment when information about the performance of groups of children is used in making judgements about educational provision at the class, school, authority and national levels.

Those who are making the educational policies are interested in whether standards are being maintained or are in decline; whether they are comparable across examination boards and also whether they are implemented in the same way nationally (Sutton, 1985; Satterly, 1989; Brown, 1991; Rowntree, 1991). The performance of pupils may be compared with that of other members of their class or school of the same year-level nationally (Gipps, 1990). Since this is based on standards (criteria) for the achievement of the learning objectives, it helps in maintaining those standards (Jones & Bray, 1986).

There are extensive research which deals with the issue of public accountability and assessment. This is based on the assumption that an educational institution must increasingly be able to show that it is achieving the aims that it has set for itself and the ones expected of it by society (Broadfoot, 1979, 1987a, 1990; Sutton, 1985; Broadfoot & Osborn, 1987; Satterly, 1989; Filer, 1993).

Having briefly reviewed some of the general purposes of assessment in the classrooms, what follows examines in more detail those purposes that aim to help teaching and learning, the main interest of this study.

### **2.2.3 Classroom Assessment**

It is very clear that the general aim of classroom assessment as mentioned previously is to form, i.e. to change teaching and learning in a positive way. It is worth exploring this formative function, which provides the actual context of classroom assessment.

Because of the negative impacts of traditional examinations, there have been developments to try to pin-point those features of the assessment process which are likely to have a positive impact on learning, particularly focusing on the provision of short-term goals and feedback on progress to pupils (Murphy & Torrance, 1988). The Task Group on Assessment and Testing (DES, 1987) stressed the potentially positive benefits of this type of assessment which are to promote children's learning as a principal aim of schools. Assessment lies at the heart of this process. It can provide a framework in which educational objectives may be set, and pupils' progress charted and expressed. It can yield a basis for planning the next educational steps in response to children's needs. By facilitating dialogue between teachers, it can enhance professional skills and help the school as a whole to strengthen learning across the curriculum and throughout its age range (TGAT, 1987, para 3).

It also goes on to underline the needs to be incorporated systematically at all levels, that is the assessment process itself should not determine what is to be taught and learned. It should be the servant, not the master, of the curriculum. Yet it should not simply be a bolt - on addition at the end. Rather, it should be an



integral part of the educational process, continually providing both "feedback" and "feedforward". It therefore needs to be incorporated systematically into teaching practices at all levels (TGAT, 1987, para 4).

Classroom assessment has been increasingly assumed to be synonymous with teacher assessment. Assessment approaches where the emphasis is on using assessment as a means to encourage learning are generally termed formative. Assessment can only be formative when it is part of a process in which there is opportunity to respond to it (Broadfoot, 1987). It is argued that assessment techniques are more likely to encourage formative assessment, namely: graded tests (Pennycook & Murphy, 1988; Gipps, 1990); graduated and staged assessments; negotiated assessments; pupil self-assessment and also peer assessment. These approaches require the active collaborative involvement of pupils and have potential for formative impact. The difference between formative and summative assessments and the purposes each serves are clearly stated by Broadfoot (1979). According to her, formative assessment places the emphasis on continuous process of diagnosis, remediation, feedback and mastery while summative assessment refers to assessment at a particular point, curriculum stage or age, not necessarily to all pupils and the emphasis is on providing reliable and acceptable information on what has been achieved as the basis for choosing who should be allowed which opportunities where these must be rationed. Sadler (1989) notes that formative assessment is concerned with how judgements about the quality of pupil responses (performances, pieces of work) can be used to shape and improve the pupil's competence by short circuiting the randomness and inefficiency of trial and error learning. He goes on to underline the distinction



from summative assessment which is concerned with summing up or summarising the achievement status of a pupil and is geared towards reporting at the end of a course of study especially for purposes of certification. It is essentially passive and does not normally have immediate impact on learning. The primary distinction between formative and summative assessment relates to purpose and effect, not to timing.

For the purpose of compiling their extensive literature review on formative assessment, Black and Wiliam (1998) defined formative assessment as “encompassing all those activities undertaken by teachers, and/ or by students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged”. An important word choice in this definition is ‘activities’, suggesting that teacher and student skills and actions are key to this process. The inclusion of feedback information used to modify teaching and the development of learning activities, widens the perspective to include teaching and planning as well as assessment strategies. Thus formative assessment is integrated with teaching practice in an indissoluble way and can occur through a wide range of teaching strategies.

Other researchers also have suggested that instructional assessment may include a wide range of integrated teacher activities. Nitko (1996) labels the range of activities involved in teaching as ‘managing instruction’. Included here are teacher activities such as planning, monitoring instructional activities, placing students into learning sequences, monitoring student progress, diagnosing learning difficulties, feedback and finally, assigning grades. Some of these

activities are directed towards summative assessment.

In the last decade, new forms of assessment for both summative and formative purposes have represented a burgeoning new field of research and academic interest. However, processes and practices involved in formative assessment have proved difficult to pin down. Formative assessment is, first of all, difficult to observe (Torrance, 1993). The recent review by Black and Wiliam surveys the research on formative assessment theory. It also examined the claims of the effectiveness of formative assessment. Their analyses of research on the efficacy of formative assessment included results from a wide range of 'real life' learning situations in schools, as well as from highly-controlled research contexts and structured programmes. The review suggested elements of teacher practice to be essential to formative assessment. They identified three conclusions about formative assessment which are that:

- Formative assessment is not well understood by teachers and is weak in practice.
- The context of national or local requirements for certification and accountability will exert a powerful influence on its practice.
- Its implementation calls for rather deep changes both in teachers' perceptions of their own role in relation to their students and in their classroom practices (Black & Wiliam, 1998).

The Black & Wiliam review researched key topics developed from an analysis of two earlier reviews by Natriello (1987) and later, Crooks (1988). Natriello surveyed a wide range of assessment topics including direction and motivation;



two terms related to formative assessment. Natriello analysed the issues “within a framework of the assessment cycle, which starts from purposes, then moves to the setting of the tasks, criteria and standards, then through appraising performance and providing feedback and outcomes.” Here again, formative assessment included teacher activities relating to planning from purposes and criteria, as well as teacher discourse relating to teaching through feedback. Crooks looked at both formative and summative assessment and their impact on student learning. He suggested that the summative function had been dominant for too long and more emphasis should be directed to assessment that assists learning. The importance of feedback in learning was also highlighted.

Torrance and Pryor (1998) categorised two distinct approaches to formative assessment arising from teachers’ differing views of learning, either behavioural relating to externally devised objectives such as curriculum or socially-constructed learning derived from negotiated meanings and intentions. Each form of formative assessment is in some way characterised by differing notions of learning goals. Convergent assessment implied finding out if the child knows, or can do a particular skill. Planning to precise plans and particular objectives and curriculum goals may direct both the methods used to assess and the forms of discourse between the student and the teacher. Tick-sheets, tests and “can-do” are relevant. Talk between students and the teacher fell mainly into the Initiation (by the teacher), Response (by the student) and Follow up (by teacher) or the IRF form (Coulthard & Sinclair, 1975). The teacher’s feedback may most often be characterised by correction or evaluation of the learner’s responses. Divergent assessment, by contrast, shifts the emphasis from the agenda and goals controlled

by the teacher to a more student-focused perspective directed by learning. It is very evident that planning and formulating learning goals are complex parts of formative assessment. Planning may be informed by curriculum, but for planning to be an effective part of formative practice, it must also attend to goals which have emerged from the discourse and experiences in the classroom. Such information must feed forward to planning, where the teacher makes adaptive changes to their planning and subsequent instruction. The teacher's understanding of what contributes to learning is therefore influential in the planning of instruction and forms of assessment integrated with planning.

One of the most important differences between formative and summative assessment is that during the former, the teacher can give feedback to pupils about how well they are doing. Summative assessment, on the contrary, cannot provide immediate feedback because the results are known too late and information is not available to the pupils about the strengths or weaknesses of their work.

A formative emphasis may suggest a need for frequent and regular assessments on each topic as it is completed, rather than one comprehensive assessment at the end of the term or year, so that processes as well as outcomes may be observed and evaluated (Lee, 1989). As with the process-product distinction, there is no clear difference between formative and summative assessments. But in distinguishing process-product and formative-summative assessments, there is an important conclusion (Shipman, 1983). Assessing when a section of work is over, cannot help pupil or teacher to do things better at the time. It is often necessary to produce evidence on what has been achieved. But it is always necessary to feed



information back to children as they learn, to adapt teaching methods and to develop curricula as circumstances change.

Assessment is usually approached as an attempt to quantify outputs, to measure the measurable. The output is prespecified and success or failure is gauged according to whether the targets have been attained. But in primary schooling in particular, there is an alternative view of learning which stresses the intrinsic value of activities, the personal growth that occurs and the role of the children in determining the direction of events (Shipman, 1983). Learning is not programmed in advance but is open-ended. Assessment cannot be planned to gauge predictable outcomes. The most important consequence of placing the formative assessment in the learning process is to shorten the time between learning and the feedback of information about performance. Most assessment is terminal and takes place so long after the learning that it cannot provide information to help the teacher or child on the next step nor motivate either (Shipman, 1983).

Black (1986) examined the evolution of formative assessment from the 1960s in British Schools. According to him, although education had moved towards a 'progressive' notion of continuous assessment, what it meant was continual examination for reporting. Because of this, Black and Dockrell (1980) report that in most cases where they saw continuous assessment taking place, feedback was in the form of a general attainment grade giving no real information about specific strengths and weaknesses.

According to Lee (1989), classroom assessment tends to be seen by teachers as having a more formative function, with the emphasis on monitoring pupils' progress, as individuals and as groups; it can be linked more closely with the particular topics and skills which pupils are working on; it can provide more immediate feedback to teachers enabling them to monitor pupils' strengths and weaknesses and plan further work. Harlen et al (1992) report that teachers who successfully use formative assessment are looking out for progress towards immediate goals and are aware of underlying ideas and skills which are required for success. They bring together several observations of the pupils' performance and find patterns which help them to uncover shaky foundations for exploring understandings which involve the pupil and avoid discouragement.

Lincoln & Guba (1981) suggest that formative assessment is concerned with 'refinement and improvement'. This is clarified by Qualter (1988) who views formative assessment as a procedure which provides information on achievements of individual pupils that will assist in the planning of the pupils' future work. It requires the use of as wide a range of assessment practices as possible. The basis for the development of such tasks is the description of clearly defined attainment targets. Formative assessment has typical features such as the emphasis on the positive, focusing upon what the children are able to do, what they know or understand. It provides the teacher with information which influences future learning and provides real feedback to the pupils. It often involves the children in discussion about their experience and understanding and contributes to their taking more responsibility for their own learning (Conner et al., 1991).



Torrance (1993) points out that formative assessment derives from either a 'behaviourist' or a 'constructivist' perspective, which are very different in their views of how learning takes place, but which could involve similar practices and procedures.

Popham (1978, 1987) described formative assessment as an essentially behaviourist activity in the mastery learning approach. This view is also shared by others (Carroll, 1963; Bloom, 1974, 1976). Predetermined goals and teaching towards them rather specifically, making sure that teachers and pupils alike know what behaviour is required of them, i.e. what counts as achieving the objective. The 'graded assessment' model seems to be based on such a theoretical perspective, namely, short-term goals, clear assessment objectives, and detailed feedback to pupils on their achievements and what they must do to improve (Pennycuik & Murphy, 1988; Gipps, 1990). However, this approach has been criticised as being too mechanistic and of specifying of the criteria in too much detail (Brown, 1988, 1991; Torrance, 1993).

The other theoretical view derives from the social constructivist perspective in cognitive psychology. Here the teacher-pupil interactions go beyond the provision of test results and the provision of additional instruction to include a role for the teacher in assisting the pupil to comprehend and engage with new ideas and problems (Torrance, 1993). What is important to identify is not just what pupils have achieved but what they might achieve, what they are now ready to achieve with the help of an adult (Vygotsky, 1986). Hence learning should be 'scaffolded' (Bruner, 1985) by pupils being set appropriate tasks and being

provided with appropriate support, with the purpose and focus of assessment being to indicate what is that pupils could achieve next. This approach looks forward rather than backwards and conceives teacher-pupil interaction as part of the assessment process itself. One of the implications of such an approach would be that the teacher/tester and pupil collaborate actively to produce a best performance (Wood, 1987).

Recent developments of teacher assessment in infant classes in the UK indicate that it tends to become over-formalised because of misunderstandings over its nature and purpose. Such a trend means that teachers are assuming the task of formative teacher assessment to be at best a rather mechanistic (Torrance, 1993) and behaviouristic one in the graded test tradition, at worst that they take the task of teacher assessment to be essentially summative.

Having reviewed the general assessment purposes, the focus is on the classroom to explore particular assessment purposes that assist in the teaching/learning process.

#### **2.2.4 Classroom Assessment Purposes**

Classroom assessment can be used, not only in summative ways to record pupil attainment after courses of work have been completed but also in formative ways to provide support for pupils' learning (Pollard et al., 1994).

Glaser (1990) stresses that assessments serve different educational purposes. He suggests that it is necessary to consider what kind of information teachers and



policy makers require and what the results of an assessment actually indicate. He wonders if the results will be used for pupil diagnosis and points teachers to appropriate teaching tactics. For recognising assessment as essential to the educational process it is implied that the information gathered is usable and is indeed used in making day to day classroom decisions. These decisions may be about the 'appropriate next steps' or about 'appropriate remedial help and guidance' (DES/WO, 1988).

According to Bachor & Anderson (1994), teachers in British Columbia and Canada consider that the main reasons for doing assessment are: to monitor pupils in relation to curricular location; to inform teaching; to inform parents, and to inform individual pupils of their position in relation to the goals of schooling. Teachers had a major thrust to have pupils consciously aware of their own learning to identify and articulate goals for their own learning, to devise ways of determining achievement and to implement these plans. These teachers were moving towards pupil self-assessment.

### **2.2.5 Formal Assessment for Diagnosis**

Primary class teachers are likely to spend some time every day assessing children diagnostically, in order to gather information which will help them to understand a child's learning difficulties and this leads most probably to some form of remedial programme (Galton et al., 1980; Satterly, 1989; Shipman, 1983; Glenis, 1989). Diagnostic assessment is often practised by teachers when they try to discover the improvement a child is making.

Assessment has a diagnostic function within the curriculum. This is so because it informs the teacher about: what each child has learned; children's strengths and weaknesses; and how far teaching has attained its aims (Broadfoot & Osborn, 1987; FEU, 1988). It also indicates needed changes and reforms of curricula or perhaps may even endorse the current ones.

Not only do teachers try to diagnose children's learning; i.e. academic needs, but also social or emotional ones in the classroom (Broadfoot, 1979; Satterly, 1989; Wilson, 1989; Thomas, 1990). They try to identify these needs to understand their cause and provide remedial action (Airasian, 1996).

Diagnostic tests enable teachers to gain detailed information on the particular points of difficulty for each pupil, information which is necessary if there is to be improvement of performance. In such tests, the responses selected by pupils from a number of options can indicate that a certain concept or process has or has not been grasped. The subsequent action is to select and offer alternative learning experiences to remedy the difficulties diagnosed. Black (1986) summarises several points which distinguished the Scottish Diagnostic Assessment model from the American mastery learning approach.

According to Black & Dockrell (1984), diagnostic assessment is valuable for promoting teachers' success and preventing pupils' failures. They describe it as "a form of assessment designed primarily to help pupils to learn and teachers to teach".



The significance of assessment in diagnosing children's strengths and weaknesses and also to identify individuals who are in need of special help, the so-called 'screening' process is also highlighted by Gipps (1990).

Shipman (1983) explains in a simple way the diagnostic and predictive role of assessment, when a teacher is wondering 'what do my pupils need to know and be able to do at the end of their course, that at present they don't know or cannot do?'. The necessity for diagnosis of the individual's progress and needs, as well as of the curriculum and pedagogic concerns, is also stressed by Black and Broadfoot (1982). They argue that diagnostic assessment can give the pupil information on the areas of work not mastered (Black & Broadfoot, 1982). According to them, the potential of diagnostic assessment is to increase pupil attainment, develop motivation and consequently change pupil attitudes to school.

The French approach to using diagnostic assessment is very interesting. Since 1989, all pupils in the third year of primary schooling are subject to diagnostic assessment in French and Mathematics in order to provide teachers with a detailed picture of the strengths and weaknesses of individual pupil so that the teachers can respond differently to each pupil's needs (Broadfoot, 1994).

Diagnostic assessment may not adequately identify the causes of failure or success (Satterly, 1989; Simpson, 1988; Brown, 1991) but it can alert teachers to children's strengths and weaknesses and enable teachers to bring their personal judgment to bear.

The diagnostic assessment discussed so far refers by and large to rather 'formal' approaches of collecting diagnostic information usually through paper and pencil techniques. However, much of this sort of assessment occurs in the classroom on an informal basis, as the next section explains.

### **2.2.6 Informal Assessment for Diagnosis**

Informal diagnostic assessment will most often manifest itself in the daily operation of a classroom. As Deno (1972) puts it: "To teach is to be judging every moment of every interaction with the child". Frith & MacIntosh (1984) suggest that specific action can be taken as a result of such diagnosis and it is more likely that any such remedial activity will be quick. This is an important distinction between informal and formal diagnostic assessment since the latter provides less opportunities to the teacher for a fast response.

Informal diagnostic assessment approach, as Black and Broadfoot (1982) note, is basically the approach followed by the 'good' teacher as she walks around the room discussing points of difficulty with individual pupils. It is the approach which provides the teacher with the feedback on which to base the most appropriate learning activity.

Although informal assessment is widely used, little attention has been paid to this mode of assessment. As Black & Broadfoot (1982) remark: "despite its clear potential, it is only recently that a start has been made to provide resources which will help teachers to apply it more systematically in the normal classroom". One possible reason for the seeming lack of attention given by research to the issue of



informal diagnostic assessment is the difficulty in obtaining accurate and meaningful information on how the process operates (McArdle, 1989).

### **2.2.7 Assessment for Motivation**

In the past few years, many studies have identified motivation for learning as a significant function of classroom assessment (Broadfoot, 1979, 1984; Harris & Bell, 1986; Jones & Bray, 1986; Crooks, 1988; Satterly, 1989; Gipps, 1990; Rowntree, 1991; Airasian, 1996). This section examines some of the various aspects and practices of assessment in the classroom that increase and decrease learning motivation.

To motivate learning, learning objectives must be realistic and attainable so that the pupils feel that they have chances to achieve them (Broadfoot, 1979; Airasian, 1996). An awareness by the pupils that their views or opinions are being taken into account should enhance their morale involvement and thus their motivation about their learning as well (Broadfoot, 1979). According to Crooks (1988), if pupils can be encouraged to think positively about their learning and to see their progress in relation to their own previous achievement rather than merely in relation to that of others, they may come to have a better self-esteem since that progress can be recognised by both pupil and teacher. Such reinforcement of success rather than failure should lead to increased motivation (Broadfoot, 1979; Crooks, 1988).

In order to enhance pupils' self-concept and learning motivation, the Records of Achievements' (RoA) Schemes were introduced in England and Wales

(Broadfoot, 1979; 1987a; Gipps, 1990). Another approach is known as 'graded' assessments (Gipps, 1990).

From a social point of view, Pollard (1990) notes that motivation in the classroom is not simply to do with stimulating the children's interests, for such a strategy is totally decontextualised. It is also about establishing a social atmosphere in which pupils know that their efforts will be valued and judged fairly. Moreover, it concerns setting tasks and providing activities which relate positively to children's social relationships, their expectations and their cultural understandings (Filer, 1993) about work tasks. If this is not done, the work given is likely to be regarded as unfair and the children's motivation will be reduced. A task should thus be socially as well as cognitively appropriate (Pollard, 1990).

### **2.2.8 Assessment for Competence**

One of the alternative approaches which has been developed to foster learning motivation with the help of classroom assessment is 'mastery learning'.

Carroll (1963) first elaborated the concept of 'mastery learning'. Bloom (1976) summarizes 'mastery learning' as "what any person in the world can learn, almost all persons can learn if provided with appropriate prior and current conditions of learning". The essential characteristics of mastery learning are that the appropriate method of presentation has to be carefully worked out to meet the abilities and needs of a child; as much time as is necessary must be provided for the child to achieve a predetermined level of mastery. There are several studies which deal with the concept of 'mastery learning' (Bloom, 1976; Child, 1977;



Broadfoot, 1982; Black, 1986; Harris & Bell, 1986).

### **2.2.9 Assessment for Communication and Control**

Assessment has a communication function which informs the pupils of their achievement level in a range of activities (Broadfoot, 1987). Reports can encourage learning if they provide information with clarity about the strengths and weaknesses of the child's performance or work, accompanied with a positive comment (Stewart & White, 1976).

Parents have also a right to know what goes on in the schools their children attend. The content of children's reports is mainly academic but sometimes, particularly in primary school, it also includes non-academic information, for instance, on children's effort, behaviour, participation, cooperation and interest in class (Broadfoot, 1986; Rowntree, 1991; Airasian, 1996).

Classrooms are social settings which are complex and where people interact with one another in a number of ways. An often ignored purpose of classroom assessment is to establish and maintain the social balance of the classroom. For classrooms to become positive learning environments, order and discipline must be present (Airasian, 1996).

### **2.2.10 Negative Effects of Assessment**

So far, what has been discussed is the potential of classroom assessment in assisting the teaching and learning processes. There are, however, certain negative effects that might be due to various reasons, such as workload, lack of

assessment training, size or quality of class, lack of time etc.

Gipps (1992a) argues that the model which the National Assessment structure in England and Wales is based on is in tension. She goes on to say that the same assessment cannot be used for formative and evaluative purposes since these require different timing, different involvement of the teacher, and different use of results.

Brown, (1991) argues that the requirements of the TGAT model in England and Wales lie at the roots of the problems being experienced by teachers, schools and development agencies in their attempts to implement it.

Several studies note the conflict between the roles of the teachers and assessors. There is a deterioration of relationship between teacher and pupils when the teacher undertakes the assessment role (Gronlund, 1978; Harlen & Qualter, 1991).

There is evidence that sometimes assessments have negative affective impacts on pupils. Ebel (1979) points out that often marks are used as a means of reward, or sanctions, so that sometimes marking becomes very unfair. Glaser (1971) writes that where there is assessment, there is failure too. The negative effects of assessment include anxiety, feelings of helplessness and lack of confidence (Harris & Bell, 1986; Howe, 1987; Satterly, 1989).

In every classroom, there are pupils who, by comparing their performance with other pupils, realise that they are not likely to be successful in terms of external



examination performance, hence a major source of motivation is ineffective. As Broadfoot (1979) points out, the source of the problem lies in the fundamental alienation of low achievers from a classroom experience which provides them only with a continually reinforced feeling of failure. Involving both pupils and teachers in assessment can help to overcome these alienative influences. Such mutual evaluation recognises the dual responsibility of both teacher and pupil in the learning process.

All assessment practices are potentially capable of raising levels of anxiety (Satterly, 1989). However, this is not necessarily a bad thing (Child, 1986), but it depends upon the level of difficulty of the task being assessed for the learner.

When pupils know that they are being assessed they may change their behaviour (Rowntree, 1991).

Several studies (Rowntree, 1977; Broadfoot, 1979; Airasian, 1996) have revealed the prejudicial aspects of assessment and it is pointed out that often teachers are in danger of applying unfair assessments on their pupils even before they meet them, by predicting their capabilities based on the evidence they have gathered from other pupils of the same age whom they have taught in previous years. There are times when pupils are labelled as 'bright' or 'dull' and this leads these pupils to behave in accordance with these labels (Broadfoot, 1979; Shipman, 1983; Shorrocks et al., 1993; Airasian, 1996). This in turn often makes teachers underestimate those children's achievements. Some teachers seem unable to respond to success when they are expecting failure (Brophy & Good, 1974).

Teachers' assessments and achievement expectations may also be influenced by factors like children's successes in other fields, race or socio-economic background. Teachers are influenced by the so-called 'halo effect'. During assessment, children are also influenced by the social relationship between them and the assessor (Roth, 1974; Rowntree, 1977).

### **2.2.11 Awareness of Assessments Potential**

Bearing in mind the evidence concerning the way in which classroom assessment practices work for good or ill in facilitating learning, it becomes interesting to ask how far teachers are aware of assessment function and potential, and how far they are able to use it effectively to improve their teaching skills and pupils' learning.

Research stresses that teachers have to be clear about why they are assessing and then to find the most appropriate methods or styles to fulfill that purpose (Rowntree, 1977; Frith & Macintosh, 1984; Lee, 1989; Satterly, 1989).

However, often classroom assessment is intuitive and many teachers are not professionally trained in assessment techniques and are unaware that this is taking place (Harlen & Qualter, 1991). Bottin (1991) reports similar findings from France.

A major role identified for classroom assessment is that of monitoring learning and informing teaching decisions on a day to day basis. In this role, assessment is an integral part of the interactions between the teacher, pupil and learning



materials. Because of this relationship, Harlen and Qualter (1991) found that some teachers who practise formative assessment well, may not recognise that what they are doing includes assessing; they feel they need to add a special task as a formal check. This partly may be due to holding an image of assessment as a more formal activity, distinct from teaching.

Considering the above, a crucial question emerges. How do teachers develop an awareness of tacit forms of assessment and enhance their effectiveness in the classroom?

There are several reasons for teachers not being competent in assessment techniques. One factor could be inadequacy of training in assessment (Ward, 1980; Newman & Stallings, 1982; Flemming & Chambers, 1983). The second factor could be that teachers focus on teaching activities rather than assessment (Airasian, 1996). They regard assessment as summative for certification, selection and accountability. Other reasons could be that teachers want to 'protect' their pupils (Pollard et al., 1994) from anxiety, discrimination, failure and other similar undesirable assessment side-effects. Another reason still could be teachers' assumption that assessment is the responsibility of Local Education Authorities or of policy makers. All these questions could be interesting topics for future research.

### **2.2.12 Overview**

This section reviewed evidence on several assessment purposes that are closely related to the main interest of this study, i.e. the potentials of classroom

assessment to assist teaching and learning. First, a brief reference to the wider assessment purposes is made, that is: to evaluate pupils, teachers, curricula and resources; provide certificates; predict, control, maintain standards, to give grades, to communicate, to serve accountability and for selection purposes.

Second, the basic purposes that assessment aims in the classroom are explored. The formative nature of classroom assessment and its potential is discussed both from the behaviourist and from the constructivist perspective.

Diagnosis of pupils' strengths and weaknesses; how well they have mastered the taught material; pupils' academic, social and emotional needs and of the instructions' difficulties are reported as a fundamental purpose of classroom assessment as well. Diagnostic information on learning or teaching difficulties can be used by teachers to: take remedial measures; provide alternative teachings and to allocate pupils to a particular level.

Informal diagnostic assessment has similar purposes but because it is unsystematic, based mainly on mental recording, this approach has not been adequately investigated. Though diagnostic assessment seems to be very useful, however, it does not provide information about the cause of the difficulties or its predictive value.

Perhaps the most important purpose that classroom assessment has the potential to accomplish is the fostering of pupils' motivation. Encouragement of pupils' effort, achievable targets, positive comments, clear feedback, considering non-



academic achievements, showing that pupils' works counts and allowing some degree of autonomy in learning, are some of the ways of enhancing motivation. Intrinsic and continuous motivation are reported to be helpful, though the role of the extrinsic motivation is questionable. Moreover, motivation is examined as a social outcome in the sense that it is strongly influenced by the learning context and pupils' socioeconomic background.

When the idea of differentiation is properly implemented, it can profoundly assist pupils' learning. It is reported as differentiation by task, i.e. different tasks according to individual abilities or by outcome, i.e. the same task for all but constructed in graded difficulty. A final purpose of mastery learning is also mentioned.

The importance of communication with the pupils, parents, teachers and other interested parties of the assessment results is pointed out as a crucial assessment purpose. The often overlooked purpose of control in the classroom also is considered.

The section on undesirable side-effects of assessment reveals how some assessments can result in demotivating, frustrating and disappointing the pupils. Some alternate assessment approaches are presented, such as RoAs.

Overall, this evidence confirms the complexity and the importance of assessment in the classroom, its potential to assist learning and hence the necessity for teachers to be aware of this potential and the effective practices available. These

two issues are of major interest for the present study. However, there is evidence that typically in most countries, teachers in infant and primary schools assess rather intuitively, amateurishly, unsystematically and even unconsciously.

The general impression acquired from the reviewed evidence is that first, not all assessment purposes are compatible and second, that policy makers shift their efforts towards alternative perspectives and approaches aiming mainly to assist teaching/learning. The trend is to 'humanise' the assessment (Broadfoot, 1986).

According to the reviewed evidence, in order to improve learning motivation, classroom assessment approaches should involve differentiated tasks, clearly articulated criteria, challenging but attainable self-referenced goals, frequent collection of information on pupils' performance, assessments that will indicate pupils' efforts and performance and provide personal, encouraging and specific feedback. It seems that research on classroom assessment implementation will need to explicitly articulate which of the multiple purposes can be realised by which combinations of practices.

In order to provide evidence about current assessment practices (a key question of this study), the next section examines how assessment is actualised on a daily basis in the classroom.

## **2.3 Assessment Practices in the Classrooms**

### **2.3.1 Introduction**

This section deals with classroom assessment practices. It aims to point out how



complex the assessment process is; to outline current practice and difficulties of implementation; to assist the interpretation of the study's findings; and to aid interested parties to select the best option according to the purposes they seek.

Assessment of children's learning, which is a complex process, can take place in a variety of ways across a continuum from informal, almost 'chance' classroom observations, through to formal, highly structured, standardised testing (Shipman, 1983; Mitchell & Koshy, 1993; Airasian, 1996).

### **2.3.2 Classroom Assessment Practices**

To many people, assessment is an all-embracing term which covers a range of meanings. According to Frith & MacIntosh (1984), assessment is, of course, a very comprehensive term and the compilers of the guide are only too well aware that they have by no means covered every aspect of the subject. They acknowledge the range of meanings and possible placing of emphasis within the term "assessment". To them assessment is a very comprehensive term.

Stiggins, Conklin & Bridgeford (1986) define assessment as unquestionably, one of teachers' most complex and important tasks. We begin to comprehend the complexity of classroom assessment as we explore the range of teachers' decisions and the plethora of pupil characteristics they must consider in making those decisions.

Morrison (1974) suggests that the study of assessment deals with a wide range of processes, events and skills which, on the surface, seem so diverse as to have little

in common. At the one extreme, there are formal examinations with academic achievement as prime concern and at the other there are the on-going events of the classroom, intrinsic to teaching, typically oral, and concerned with scholastic, social and managerial issues.

Classroom assessment involves four phases and these are as follows: information collection, interpretation of information, teachers' response/ comments and finally the implications of teachers' response on the child.

### **2.3.3 Information Collection**

In this phase, various means of collecting information are employed by teachers and schools and these approaches vary considerably (Murphy, 1987; Satterly, 1989; Broadfoot et al., 1991; McCallum et al., 1993). Individual teachers frequently adopt their own approaches according to their classroom situations (Murphy, 1987).

There are a variety of assessment activities that take place in primary classrooms which include teacher - made written tests, check-lists, class or group discussions, oral questioning, informal observation of children's performance, interaction with the teacher or peers; marking or commenting on performance of various kinds and a variety of written exercises, such as worksheets, assignments, projects and tests. Research conducted in many countries reports that nearly all of these practices are universal (Morrison, 1974; Rowntree, 1977; Fennessy, 1982; Shipman, 1983; Gullickson, 1985; Stiggins & Bridgeford, 1985; Anderson, 1989; Satterly, 1989; McCallum et al., 1993; Broadfoot et al., 1994).



In the USA, several researchers have come to the conclusion, from a number of studies in the schools, that teachers purposely go beyond test scores and are intent on using observation - based approaches to collect information for making decisions (Salmon-Cox, 1981; Kellaghan et al., 1982; Dorr-Bremme & Herman, 1986).

In Canada, teachers use an array of procedures with observation being the most widely used (Bachor & Anderson, 1994). Other common assessment practices included collection and review of pupil work samples, tests, and pupil self-assessments. However, these approaches are not discrete, specific activities; rather, they constitute broad categories of assessment practice and vary considerably in application from time to time, and from teacher to teacher.

According to Stiggins (1985), the assessments that influence classroom learning and pupils' academic and personal self - concept are those developed and used by teachers on a day to day basis. With experience, teachers come to trust their own observations and professional judgments regarding pupil achievement and rely on pupil behaviour and products as indices of growth and development.

Teachers when talking of how they assess their pupils, most frequently mention that "my own observations and pupils' classwork" are crucial or important sources of information (Salmon-Cox, 1981; Dorr-Bremme & Herman, 1986).

According to Airasian (1996) pen and paper techniques and observations are the

two primary methods for collecting information about pupils, teaching and classroom environment. Much of the information for classroom decision making comes from teacher observation, not from paper-and-pencil assessments since they are time consuming to administer and score. Unplanned observations make note of idiosyncratic, unsystematic happenings in the classroom which the teacher sees, mentally records and interprets (Airasian, 1996).

There is evidence that teachers do not trust assessment instruments provided by external bodies such as standardised tests. They rely on the instruments they themselves develop, teacher-made tests, reports etc. (Walstom & Danley, 1976; Dorr-Bremme, 1983; McCallum et al., 1993).

Some kind of collaborative assessment between teacher and pupil often appears in primary classrooms where discussion and negotiation between teacher and pupil are held about assessment criteria, methods and grading. It accomplishes the above aim and provides valuable feedback to the pupil (Harris & Bell, 1986; Broadfoot, 1987a; Satterly, 1989).

Constructively appraising the work of peers is an already established practice in some subjects and fields. Many teachers encourage their pupils to exchange work with one another in class (Sadler, 1989). Pupils develop their pool of strategies by learning to revise and refine their own work in cooperation with the teacher and by editing and helping other pupils to improve theirs (Chater, 1984; Harris & Bell, 1986).



Formal testing under carefully controlled conditions is often only a small component of the total set of evaluation activities in a course, especially in the early years of schooling (Crooks, 1988; Airasian, 1996). In two studies (Dorr-Bremme & Herman, 1986; Haertel, 1986), it was found that on average, in elementary school, tests occupied pupils for about 5% of their time. Much additional time is spent on other activities that are evaluated formally and informally. Particular emphasis is placed on these non-test approaches at the elementary level (Gullickson, 1985).

Most of the tests that the teachers use very often are those that fit their practical circumstances: formal or informal assessments they themselves develop. These are immediately accessible (Dorr-Bremme, 1983).

Bateson (1990), in a study of several science teachers from all age-levels in Canada, found that first, they depend heavily on their own objective-type tests on which to base pupil evaluations. Second, attendance and classroom behaviour become more important and oral tests become less important as the age-level increases.

In subject areas like Mathematics and Science, teachers give more emphasis to their own objective tests. By and large, teachers are the only raters of their pupils' performance, and they rely a lot on mental record-keeping to store and retrieve information on pupils' performance. As pupils progress through the school, so does the tendency to write down the criteria and inform the pupils of them, plan scoring procedures and define levels of performance (Stiggins & Bridgeford,

1985).

Pollard et al (1994) suggest that very few infant school teachers use standardised tests. Marking of written work is universally practiced with the emphasis on doing it collaboratively, with the pupil, to give personal reinforcement and encouragement. In this way, they attempted to initiate pupils into a kind of self-assessment. Observation of individuals and small groups stood out as the major domain of innovation in assessment practice and teachers were found to be making this more formalised than before. Although it was found that assessment was implemented in a more structured, disciplined and accountable way, nearly all the teachers noticed its undesirable effects; it was time-consuming and was regarded as amounting to a bureaucratic paper-pushing operation.

Overall, they found a much greater emphasis on assessment and record-keeping; some considerable resentment at the time demands and the perceived unnecessary formalisation of much of it; fears about the potential impact of such pervasive assessment and recording on the teaching-learning process, relationships with parents and the pupils themselves.

Osborn and Broadfoot (1994) report that the English infant teachers they studied remain individualistic in their outlook, basing much of what they do and believe on personal experience rather than on generalised knowledge and practice. Nias (1989) has referred to such teachers as being atheoretical and school bounded.

According to Broadfoot et al. (1991), the critical role of validity if the assessment



is to be at all useful and meaningful should be recognised. They went on to comment that teachers are being required to face up to the critically important role of assessment in monitoring systematically the progress and learning needs of each pupil.

Each assessment technique has its particular strengths and weaknesses. It is vital for teachers to choose an assessment approach that is best fitted for providing the kind of information required. According to Rowntree (1991), the decision sometimes will be taken in advance. What questions to ask, whether or not to set a test or a task. Sometimes it will be an "on-the-spot" decision, whether or not to pay heed to a particular event as a source of assessment data. Either way, whether planning assessment events or admitting those that have "just happened", what criteria do we apply? First and foremost, we must apply criteria of educational relevance. For instance, does a particular assessment method seem to "go with" the content and style of the teaching and learning expected by our pupils?

Satterly (1989) notes that it is difficult to choose which of several apparently conflicting modes of assessment best reflect the educational intentions of teachers and schools or which combination best serves the evaluation of the attainment of educational objectives.

Frith & MacIntosh (1984) propose that teachers selecting the appropriate assessment technique must bear in mind: the purpose for which the assessment is to be undertaken; availability of time and resources; age and ability of pupils. They suggest a balance for the combination of information obtained from the use

of several techniques.

Overall, the practices teachers use most often everyday in the classroom, correspond to the practical needs they face and the routine tasks they must carry out. Further, in all these activities and making choices antecedent to them, teachers become themselves practical reasoners and decision makers in their everyday profession (Dorr-Bremme, 1983).

In general, the above evidence shows that many teachers rely upon and trust their personal interactive experience with children in the classroom. They tend not to trust the results of one test or one assessment approach, without reference to everyday teaching evidence. As McLean (1985) points out, evaluation is more craft than a profession; teachers measure and evaluate more through a 'folk knowledge' than from a theoretical and practical base. Several researchers (Anderson, 1989; Brown, 1991) suggest building on good current practice.

Broadfoot (1979) examines the way assessments are implemented by shifting the focus from the actual assessment practices to the predominance of concern about techniques at the literature which is confirmed by disputes about the accuracy of formal examinations, the advantages and disadvantages of objective tests, the potential of item-banking, the relative merits of various moderation and scaling techniques, the sophisticated statistical procedures being developed for fixing discrimination and facility values and the debate over the desirability of continuous versus point in time assessment.



The focus of such discussion is on examining current practice and working out how it may be changed to become more efficient and manifestly more fair. The importance of this is compounded by the effects of the use of particular assessment techniques (Broadfoot, 1979). An HMI report (1990) emphasises the role of teacher assessment in the context of ongoing classroom interaction and not just referring to written products, that is, good assessment practice involves a carefully balanced combination of observation, questioning, discussion and marking. For example, practical work gives the opportunity for questioning and discussion. Questioning helps children to learn and their responses provide evidence of the depth and quality of that learning.

#### **2.3.4 Self - Assessment**

The primary goal of the assessment practices is that pupils should be able to assess themselves and to pursue new goals. Shipman (1983) argues that self - assessment has profound implications for teaching and learning style, since a commitment to share with children responsibility for learning suggests the adoption of classroom practices which embrace the ideals, goals and principles of self - assessment and encourage teachers to develop skills in participant observation rather than didactic skills.

This was the main idea of the Records of Achievements (RoAs) in which pupils take more control of their own learning, set targets for themselves, actively assess their own achievements and thus become more confident, responsible, adaptable and able to work as part of a team. RoAs have also required teachers to abandon some of their authority and undertake cooperative enterprises with the pupils

(Broadfoot et al., 1990).

Towler & Broadfoot (1992) explain that the process of self assessment is likely to lead to a positive influence upon teaching style and management in creating a more truly democratic partnership between teacher and pupils. According to them, a coherent policy of self - assessment helps children to develop powers of reflection and self - criticism, encourages motivation by giving responsibility to children for their learning and by implying that their opinions matter.

As far as the rationale of the self-assessment is concerned, they point out that involving children in the assessment process is a natural extension of the child-centred approach towards learning characteristics. Reflection and evaluation can encourage understanding of what is expected, improve motivation, lead to pride in positive achievement and offer a realistic appraisal of weaknesses.

### **2.3.5 Recording**

For most primary school teachers, day-to-day records are notes, comments and reminders in relation to pupils' progress and future activities. Most teachers keep these comments in their heads (Airasian, 1996; Pollard et al., 1994), while others keep a note book (Harlen, 1978; Black & Broadfoot, 1982; Gipps, 1990). Many teachers regard records as rather a chore to complete and therefore make little use of those passed on by other teachers (Murphy, 1987). This view is criticised (Gipps, 1990) because first, it is a waste of everyone's time to ignore previous records of children: a more positive view of teacher assessment might be that teachers could maximise the benefits of their colleagues' insights by reading the



records of children who they are responsible. Second, without proper records the information which is passed from one teacher to the next is likely to be of a general nature, about the child's overall ability, rather than specific information related to what the child can and cannot do.

There is considerable variation in the recording procedures adopted by primary schools teachers in Great Britain (Clift, Weiner & Wilson, 1981). Conner et al., (1991) suggest that a recording school system should not demand a lot of teacher time; should not be too 'jargonistic' or lengthy; and should not be a device to increase school control over the lives of children.

### **2.3.6 Constraints in Implementing Classroom Assessment**

According to Airasian (1996), some of the difficulties teachers encounter in implementing good classroom assessment include the enormous bulk of interaction which takes place in the classroom, questions of subjectivity and reliability of these assessments, the lack of systematic recording approaches to keep the information, and the need to control the class while all this is being done. This view is also shared by others (Broadfoot et al., 1991; Freedman, 1991).

Brown, M (1991) reveals many such problems investigating the trial of the pilot SATs of the National Curriculum in England and Wales. Such difficulties stem from issues like those of summative assessment, when teachers have to report on large numbers of attainment targets. She goes on to mention the issue of differentiation which engenders so many difficulties because of the wide range of targets and levels required to be included. She argues that the requirement of

summative assessment and reporting at the end of each Key Stage produces a whole set of problems concerned with methods of processing results such as combination, aggregation, moderation and reporting.

Broadfoot et al., (1991) also point out the problems related to the successful realisation of the ideal. Among them are the nature and range of the assessments teachers are being required to make; the time, energy and the skills necessary to conduct them effectively; the unavoidable technical problems related to validity, reliability and comparability, and most important, the accomplishment of what is by itself a process of professional development against a political backdrop of power politics and competition; of 'high stakes' testing and simplistic assumptions about quality.

Torrance (1991) notes similar difficulties evaluating the SATs (Pilot 1990) at Key Stage One of the English National Curriculum. Teachers complained about workload and that relationships with parents were affected; difficulties in trying to focus on small groups of pupils for the purpose of assessment while also managing the rest of the class; pupils being ignored. According to him, the standard of work produced in non-assessed activities deteriorates steadily. The children's behaviour deteriorates also because of lack of attention given by the teachers.

This extent and complexity of the English National Curriculum and Assessment procedures have resulted in teacher overload, curriculum fragmentation and unmanageable assessment requirements. These problems were officially



recognised by the Government and became the subject of a review by Sir Ron Dearing (Pollard et al., 1994).

### **2.3.7 Interpretation of the Collected Information**

During this important phase of the assessment process, teachers compare the information collected and the desirable standards. These standards are of three types and these are as follows:

- Norm-Referenced assessment: attainments are compared with the attainments of other pupils;
- Criterion-Referenced assessment: looking at pupils' competence in mastering a particular piece of knowledge or skill, irrespective of the performance of other pupils;
- Self-Referenced assessment: the teacher compares pupils' performance against their own previous performances.

The above three kinds of referencing are found in every classroom. *"All of you must be able to master it by to-morrow."* The criterion level is set and the teacher concentrates on checking that the class has attained it. *"Jim, you should be able to do as well as Karen."* Here Jim is compared with the performance of Karen. *"You are performing much much better; Your standard was very poor last week."*

The past performance is set up as reference. The teacher compares the new work with it, as the child is assessed against her own past.

There are a number of studies dealing with the three types of referencing (Rowntree, 1977; Glass, 1978; Black & Dockrell, 1984; Black, 1986; Satterly, 1989; Gipps, 1990; Airasian, 1996). What follows is an examination of these reference standards separately. The review of these standards is related closely to the study's questions regarding the evidence we have of Mauritian teachers' current practices.

### **2.3.8 Norm-Referenced Assessment**

Most classroom assessments are referenced against the norms of performance of the class as a whole (Rowntree, 1977; Shipman, 1983; Satterly, 1989; Airasian, 1996). In this kind of assessment, teachers compare the performance of one pupil against that of other pupils. Children may be ranked for comparison or given grades or percentages after consideration of how well they have done against their peers. Any one pupil's grade is determined by reference to how well the rest have done.

The difference between Norm - and Criterion - Referenced assessment is important since grades, marks and comments mean nothing until the reference is known. Most classroom assessments tend to be referenced against norms of performance of the class as a whole (Rowntree, 1977; Shipman, 1983; Satterly, 1989; Airasian, 1996).

Teachers are often required to make judgments about the quality of pupils' performances. The process of judging the quality of pupils' performance is called



'grading'. It is the process by which scores and descriptive information are turned into marks or letters, into grades that depict how well each pupil has learned (Airasian, 1996). To grade, a teacher must compare a pupil's performance to some group or standard.

Norm-Referenced tests tend to focus on differences between individuals and groups, making use of some norm to enable comparisons to be made (Jasman, 1987). According to Harlen (1978), such a test is one which was given to a large number of children in controlled conditions and from the results 'norms' have been established for different groups of children, usually age groups. The result of giving a test to any child can therefore be compared with the average for a particular group. These tests were most often used as a means of selection and as a basis of prediction of future performance in the 11+ examinations, i.e. for ranking or as means of monitoring standards in schools (Jasman, 1987).

Michaels (1977) investigated the Norm-Referenced standards and designated the reward structure associated with this practice as individual competition, in which grades are assigned to pupils based on their performances relative to those of their classmates. He differentiated it from individual reward contingencies, in which grades are assigned to pupils on the basis of how much material each pupil apparently masters.

According to Satterly (1989) and Airasian (1996), teachers look for a grading curve which is fair to the pupils and which represents academic standards that the teacher feels are appropriate. The comparison which is used to assign grades to

pupils can influence the effort and attitude of the pupils (Rowntree, 1977; Child, 1986). Several studies have shown that Norm-Referenced standards are likely to undermine the effort of pupils who regularly score near the bottom of the class, because of them continually receiving poor grades (Ebel & Frisbie, 1986; Crooks, 1988; Airasian, 1996). Competitive grading approaches such as Norm-Referenced grading which make a pupil's success or failure dependent largely on the performance of peers, can also reduce cooperation and interdependence in study (Crooks, 1988). According to Satterly (1989), many teachers believe that drawing comparisons between individuals and providing scores which describe the child's standing in a group serve chiefly to foster a spirit of competition which is inimical to the maintenance of a climate for learning in which children are able to develop at their own pace (Satterly, 1989).

Many studies are very critical of the Norm-Referenced approach (Mc Intyre, 1970; Kriewall, 1972; Popham, 1973; Carver, 1975; Drever, 1978; Brown, 1991). This approach is criticised because of the ways the tests are constructed and administered and also the ways in which the results are made use of. According to them, pupils become more anxious and, as a result, they think less well of themselves and of their work. They have less favourable attitudes towards their classmates and less friendly relations with them.

### **2.3.9 Criterion-Referenced Assessment**

Assessment approaches that compare a pupil's performance to a predefined performance standard are called Criterion-Referenced. Instead of grading by comparing a pupil's performance to that of other pupils, the teacher compares the



pupil's performance to pre-established performance standards. Because the content is determined by consideration of objectives, the assessment is objective-based. The reference is criteria to mastery of some specific standards. These standards define the level of mastery a pupil must attain to receive a particular grade. When a pupil is assessed in a competence in a particular level of learning, it shows whether he/she is ready to go on to the next learning unit because of his/her mastery of the prerequisites (Satterly, 1989; Airasian, 1996).

Pupils are assessed on the basis of their own work, irrespective of the work or performance of other pupils. Criterion-Referenced assessment is the most commonly used assessment system (Hills, 1981; Ebel & Frisbie, 1986).

In Criterion-Referenced assessments, there are two kinds of performance standards. In the first kind, what the pupils must achieve in order to get a particular grade is specified in detail. The second, which is most commonly used, has to do with paper and pencil achievement tests. In this standard, cut off scores based on the percentage of items answered correctly are used to award grades (Airasian, 1996).

A number of studies have stressed that the performance standards that are used in Criterion-Referenced assessments should be reasonable given the ability of the class and the nature of the subject matter (Hills, 1981; Broadfoot & Osborn, 1987; Crooks, 1988).

According to Airasian (1996), performance standards should be defined before

assessment is carried out. He goes on to suggest that lowering of standards to ensure high grades leads to less effort in the pupils' approach to the subject matter. According to him, fairness means teaching pupils the things on which they are assessed, using assessment procedures that are clear and suited to the pupils' level and classroom experiences, and establishing performance standards or a grading curve that is realistic in terms of what pupils can attain if they work hard.

Despite Criterion-Referenced assessment being the most commonly used assessment system (Hills, 1981; Ebel & Frisbie, 1986), it is asserted that it is unlikely to improve learning (Simpson, 1990). She argues that a single form of assessment cannot serve the separate purposes of monitoring pupils' attainment and certification and also of improving the teaching and learning processes. She goes on to add that this kind of formal assessment does little more than providing data to permit national monitoring of educational standards and that it has no direct educational merit since it is limited to the determination of how much pupils remember of what they have been taught.

The use of vague criteria in Criterion-Referenced assessment was given a strong warning by Popham (1974) who noted serious shortcomings of many Criterion-Referenced tests. He went on to suggest isolating a small number of very important behaviours to be measured since a few broad objectives for assessment are sufficient. Such difficulties are also noted in the development of grade criteria for GCSE and for Standard Grade in Scotland (Gipps, 1986; Murphy, 1986).

Gipps (1992) commenting on the development of the assessment of the English



National Curriculum, points out that the more specific and detailed the criteria, the more accurate is the assessment. She notes that the more detailed and specific the criteria, the more cumbersome the assessment becomes, and the more fragmented the curriculum is likely to be. The more general the criteria, the fewer there will be and the assessment task is then more manageable but less accurate. One of the major problems with this type of assessment is the problem of trying to combine clarity of criteria with utility. She suggests experimenting with the level of generability/specificity of the criteria required for them to work, particularly in relation to teachers being able to interpret them and make their own criteria if necessary.

Torrance (1991) suggests that we pursue a Criterion-Referenced system which works very well. Gipps (1992) suggests involving practical, school-based investigation and development, focussing on the problems and possibilities of making learning goals and processes more explicit and accessible, involving pupils in the selection of evidence which demonstrates attainment, designing more flexible pathways to accommodate formative feedback.

Harlen & Qualter (1991) examined several issues that were related to the development of SATs. As far as the issue of the relationship between teaching and learning is concerned, they noted that SATs allowed greater comparability between children and a means of detecting any systematic variations in teachers' assessment. They were basically for summative assessment rather than to assist learning, which is the purpose of formative assessment, although it is acknowledged that learning took place as a result of the activities.

### **2.3.10 Self-Referenced Assessment**

The most typical approach to giving assessment meaning in the primary classroom is to refer to previous performance. According to Bloom (1976) and Child (1981), time taken to learn to a given standard is the most important and educationally relevant dimension on which children differ. Where teaching and assessment coincide, self - referencing is the most popular in the classroom (Shipman, 1983).

Harlen (1978) called the self-assessment, 'pupil referenced assessment' and pointed out that it was seen as less invidious than comparisons with norms and criterion levels since it valued the individual and judgments were made in the context of that individual alone. Though norm - and criterion - referenced tests could be used for this purpose, the essential difference between these modes of assessment and pupil - referenced assessment lay in the method of interpreting the data obtained from using such methods (Jasman, 1987).

Despite its popularity in the classroom, there are difficulties in such a system which arrives at a grade by examining the improvement a pupil has shown over time (Hills, 1981; Ebel & Frisbie, 1986; Airasian, 1996). In this system, a pupil's performance early in a term is compared to the pupil's performance later in a term. Those pupils who show the most progress get the highest grades. The weakness of this system, however, is that children who do well early in the term have little chance to improve, and thus have little or no chance of receiving good grades. while those scoring low at the beginning of the term have the best chance for



improvement, and thus obtaining higher grades (Airasian, 1996).

### **2.3.11 Impact of Norm, Criterion and Self-Referenced Assessment**

Brown (1991) reviewed the development of the criterion - and norm - referenced approaches during the sixties and seventies and remarked that the central concern of the criterion-referenced approach was to provide information about the specific knowledge and abilities of pupils through their performance on various kinds of tasks that are interpretable in terms of what the pupils know or can do, without reference to the performance of others.

Wergin (1988) points out that if the purpose of assessment is to distribute pupils on a scale of ability or knowledge from most to least, a Norm-Referenced test is needed. When the purpose is to judge whether pupils have completed the course objectives satisfactorily, this would imply the use of Criterion-Referenced tests. Norm-Referenced assessments are based on the assumption that the best test is one that depends on the purpose the teacher aims and produces a normal (bell-shaped) distribution of responses and maximises the distance among examinees.

Williams et al., (1975) found no significant differences between the achievement and self-reported attitudes or school-related behaviour of pupils exposed to Norm-Referenced and Criterion-Referenced standards.

Norm-Referenced standards have been compared to Self-Referenced standards for their impacts on pupil attainments. Slavin (1980) found that pupils assessed

against their previous attainments in experimental classes achieved more on a final standardised test than pupils in control classes assessed by Norm-Referenced methods. Rheinberg (1983) found that pupils working under Self-Referenced standards devised more realistic strategies of goal setting, more often attributed their success to their effort and performed better than pupils working under Norm-Referenced standards.

Bolocofsky & Mescher (1984) found that Self-Referenced standards worked best with pupils with low self-esteem and internal locus of control. Criterion-Referenced standards worked best with pupils with low self-esteem and external locus of control. Norm-Referenced standards worked best with pupils with high self-esteem regardless of locus of control.

Hanna & Cashin (1987) suggest that if the instructional goals are general, complete mastery of the educational domain is unrealistic, and if the ultimate purpose is to select the best and the brightest, teachers have to consider the use of a Norm-Referenced approach; if the goals are quite specific or if the ultimate purpose is to ensure that pupils have mastered certain competencies, they have to consider the Criterion-Referenced approach.

### **2.3.12 Overview**

This section so far examined the issue of classroom assessment in practice and showed several interesting points that are summarised here. Teachers apply a great variety of practices, dependent mainly on the subject and the age-level. Observation seems to be the modal approach followed by paper and pencil ones.



In primary classrooms, the evidence collection is mostly informal, subjective, intuitive, idiosyncratic and unsystematic. Formal testing seems to constitute only a small fraction of assessment approaches. Teachers, by and large, trust the instruments they themselves develop and their own observation instead of external instruments, tests, SATs, etc. One can say that this reflects a history of teachers' ownership and autonomy.

There is a trend to involve the pupil on his/her assessment (cooperative approaches, self-assessment, Records of Achievement). Another interesting point is that teachers do not rely on a single source of information but they bear in mind the everyday performance of the pupils. Attendance and classroom behaviour become more important and oral tests become less important as the age-level increases.

Teachers typically tend to apply practices to which they have immediate access and accomplish their practical needs. The decision about which specific technique to use is a practical matter not a scientific one. The necessity for a sampling process to select the evidence needed is pointed out. For the selection of the proper approach, teachers have to bear in mind the purposes they pursue, the age-level, the time and the resources available. Research suggests that by and large primary teachers keep mental records of their daily assessments. Among the problems teachers face are the time restrictions, the undesirable influence on teacher – pupil relationships, the lack of assessment training, the workload and the lack of confidence. However, there is evidence that teachers in England and Wales, for instance, have started to become professional assessors, having

gradually obtained the knowledge, skills and confidence to carry out the operation. Eventually, there are suggestions for improvements by disseminating and using cases of good practice and providing the necessary training.

The dispute of classroom assessment criticises the unsystematic evidence collection and recording, the lack of 'hard' data, the lack of validity and reliability of the information based on such phenomenological data.

This section also reviewed the standards to which teachers refer in order to interpret the assessment evidence. The reference can be norm, criterion or pupils' previous performances. The advantages and disadvantages of each approach are explained. Norm - and Criterion - Referenced tests mainly provide results for external consumption, serving the purposes of prediction, selection, curriculum evaluation and monitoring standards. These purposes however, do not help in evaluating pupils' levels of development, evaluating teaching practices or providing feedback to pupils on achievement of specific objectives. The main point which emerges from all this is that the key aspect for consideration in the selection of assessment practices is the way in which the collected evidence is to be interpreted and for what purpose.

Having examined research evidence on the main advantages and limitations of each reference standards and for which purposes they are suitable, it is interesting to investigate the empirical part of the study, which reference standards, if any, are suggested by the Mauritian education authorities in the primary schools.



From the previous evidence, a need for consideration of the content of the assessment criteria becomes obvious. The following section, therefore, refers to educational objectives and examines what teachers look for when they are assessing.

## **2.4 What is Assessed in the Classrooms**

### **2.4.1 Introduction**

A significant aspect of the classroom assessment enterprise refers to the content of the assessment goals. Some questions emerge: what qualities do teachers look for in their pupils? Whether they have learned a given concept, piece of knowledge; whether they comply with the classroom rules or if they are interested in the lesson? What sort of goals are considered as most appropriate? Are pupils and teachers clearly aware of the objectives that are pursued during a given teaching session?

In this section, a consideration of the literature on these issues will help the interpretation of the study's data; it might explain why teachers assess particular pupils' features, show the necessity for teachers and pupils to be aware of the learning objectives.

This section deals with cognitive and non-cognitive qualities and the weight teachers place on each category and looks deeper at the cognitive ones. It also examines which children's qualities teachers intend to assess in the classroom and if eventually they assess only these qualities. Very frequently assessments are global. The pupil is good, fair or poor but it is not made clear in what. Definition

in advance means distinguishing between assessment of attainment, effort or ability, improvement or deterioration. The definition of what is being assessed adds meaning to the exercise (Rowntree, 1977; Shipman, 1983; Satterly, 1989).

#### **2.4.2 Assessment of Cognitive and Non-Cognitive Qualities**

The importance of defining what is being assessed in advance adds meaning to the exercise and distinguishes between assessment of attainment, or effort, or ability, or improvement or deterioration, or potential, or behaviour (Rowntree, 1977; Shipman, 1983; Satterly, 1989).

There is evidence that teachers assess both cognitive and non-cognitive characteristics - attitudes, and behaviours (Black & Broadfoot, 1982; Airasian, 1996). Teachers use information about pupils' participation and involvement in the lesson to judge how well their lesson is going, and they value information on their pupils' affective characteristics (Clark & Peterson, 1986). Woods & Naphthali (1975), for instance, found that the teachers in their study preferred, when they took a new class, to have information mainly about the following six affective attributes: interest, class participation, quietness, confidence, tidiness and behaviour as well as mathematical ability. These were classified as cognitive, affective and recreational.

Management routines play a very large part in teachers' classroom behaviour. Doyle (1986) found that beginning teachers are concerned more with their own teaching ability and performance, whereas experienced teachers expressed more concern for the pupils' learning.



Although cognitive assessment is a dominant interest, teachers observe, evaluate and act upon hints of on-going social behaviour and upon their perceptions of the more or less prevailing personal traits of pupils. All this is done informally. Teachers' informal assessments inform them about the affective features of their pupils, such as who is trying hard, who cares about the lesson, who is a good classroom citizen (Airasian, 1996).

Cameron-Jones & Morrison (1973) report that comprehensive school teachers concentrated on the cognitive aspects, i.e. knowledge and comprehension, to the lower levels of Bloom's taxonomy (1956).

Rowntree (1991) points out that teachers are not always aware of what children's characteristics they are assessing. Teachers may say, for instance: "I'm trying to assess the children's recall of the homework assignment", when it is clear to observers (from the way teachers selectively encourage and discourage, condemn and ignore children during the assessment episode) that they are also assessing compliance with their classroom rules, about shouting out answers, handraising, listening to others, keeping quiet when the teacher speaks, avoiding local dialect, and so on. This means that there are explicit and implicit assessment constructs.

Morrison (1974) and Brown & McIntyre (1977) found that the teachers insisted that they assessed only cognitive characteristics. They rarely mentioned other traits when evaluating their pupils.

Teachers in general, want their pupils to express respect to others and the rules of the classroom society and to try hard to learn what is taught. Teachers also hope their pupils will develop an interest in the teaching unit and enjoy learning about it. However, such objectives are rarely stated explicitly by the teacher or assessed with formal assessment procedures. This happens because first, affective objectives like interest and attitude are thought to be private behaviours (Airasian, 1996) and second, affective outcomes are difficult to assess (Broadfoot, 1979).

Overall, the above evidence indicates the importance teachers placed first on the basics and second, on children's acceptable attitudes which reveals the underlying trend of teachers to control their pupils.

### **2.4.3 Assessment of Process or Product**

It is important to distinguish between assessing the products of work and assessing the process through which they are achieved. The concern may be in giving a grade for the finished activity after considering the finished outcome; but the concern may be more with the way it was produced, the way the children set out gathering, categorising and interpreting information (Satterly, 1989). In the first example, attention is paid to the ideas presented, the quality and quantity of work, its relevance to the subject set and to evidence of originality. In the second, the concern is on how the work was carried out, planned, executed and demonstrated (Shipman, 1983; Airasian, 1996). In one, there is final assessment; in the other, it is the on-going procedures.

Process and product are intimately related - there would be no product without



process. However, a product may fail to reveal all about the processes which produced it (Frith & MacIntosh, 1984).

Most primary school teachers focus mainly on outcomes in assessment because they are measurable (Satterly, 1989; Airasian 1996). The project, the essay, the sums are specific products of methods employed. They may indicate that the methods have been mastered but the teacher may have to guess at this (Satterly, 1989).

In England and Wales, the development of the primary curriculum was characterised by a tension between two approaches to education that began from an interest in the end result and those which focused on the child and processes of learning. This was reflected in the debate on the nature of aims and objectives, pre-specified objectives being seen as restrictive and favouring 'products' through a content - based, basic skills curriculum. On the other hand, relational aims, problem solving objectives and expressive outcomes have been seen as enabling a process - orientated, child-centred curriculum to develop. There has been a number of illustrations of the conflict between processes and products in the development of methods used to evaluate the curriculum (Hamilton, 1976; Tawney, 1976; Jasman, 1987). According to Jasman (1987), schools need to be very clear about their goals, how these are expressed and how it may be checked whether they are being achieved.

#### **2.4.4 What are Educational Objectives**

Educational objectives are used to express the particular goals of a given lesson

that the pupils have to attain. Rowntree (1991) defines the concept of objectives to mean the skills, abilities, knowledge and understanding on which the teacher intends that pupils should improve as a result of his/her interventions. The use of objectives is grounded in an assumption that the purpose of education is to help people change. They are to become different from what they were, developing their existing qualities and abilities, and acquiring new ones. They are to change the way they think, act and feel. They are to become knowledgeable, more skillful, more confident, more rational, more sympathetic, more insightful, more autonomous, and so on.

According to Rowntree (1991), the description of the three well known categories of objectives are cognitive aims and objectives - to do with thinking and intellectual processes; affective - to do with attitudes and feelings; and psychomotor - to do with muscular activity".

According to Airasian (1996) educational objectives are statements which describe the behaviours children can show after teaching. These are determined by considering children's needs and available teaching resources. Often teachers do not include on a lesson plan the objectives. Of course teaching can go on without the objectives but it is likely to focus on moment-to-moment activities rather than on the more important and long range issue of what pupils ought to learn from instruction. This lack of focus on pupils' outcomes creates problems when a teacher tries to assess the progress of teaching and, when it is completed, what pupils have learned. According to Airasian (1996), educational objectives serve a number of important functions in the instructional process. They identify



intended pupils' outcomes; they provide direction for the teacher in selecting instructional activities and material; they provide the basis for assessment; they are useful reminders to the teacher of what the goals of instruction are; they help communicate to parents, pupils, administrators, and other teachers what is expected from the pupils.

The specification of objectives was central to the development of national curriculum models. Firstly, these objectives were pre-specified and described in behavioural terms (Tyler, 1949; Bloom, 1956; Mager, 1975). This facilitates the assessment of the effectiveness of a new curricular programme to be made in relation to the degree of success in achieving these objectives, as measured by summative processes at the end of teaching.

However, planning by the pre-specification of objectives simply in behavioural terms has been seen by some to be 'most seriously disturbing' (Blenkin & Kelly, 1981) since a more goal-orientated, content curriculum was emphasised rather than the process curriculum which was being advocated in the late 1960s and early 1970s (Jasman, 1987).

Dearden (1976) argued that in the progressive primary school teachers should avoid making aims that are prescriptive of content or pupil behaviour by concerning themselves with 'relational' aims; that is, aims that focused on the child's developments of a positive attitude to learning, intrinsic interests and self-expression. Eisner (1979) also disputed the use of behavioural objectives alone in curriculum planning because goals are not always clear. Purposes are not always

precise. Many of the most productive activities take the form of exploration and play. In such activities, the task is not one of arriving at a reperformed objective but rather to act, often with a sense of abandon, wonder and curiosity out of such activities rules may be formed and objectives may be created. Such activities could only be described using terms such as understanding, insight and interest which could not be observed in behavioural terms but only inferred from the child's actions. These alternative ways of looking at educational objectives were described as 'problem-solving objectives' and were seen as important adjuncts to behavioural objectives in curriculum planning and evaluation (Jasman, 1987).

Overall, the above evidence raises the very important question of who finally has the power to determine the criteria of assessment.

#### **2.4.5 Teachers' Awareness of Objectives**

Another significant issue refers to teachers' perceptions about objectives and hence of whether and how clear they make them to their pupils. Morrison & McIntyre (1973) argue that much of the difficulty teachers face in assessment arises from teachers failing to be clear in their own minds about their educational objectives and therefore not being in the position to determine a really appropriate means of assessment.

Research suggests that teachers have to be as analytic as possible in the identification of what it is they want children to be able to do as a result of teaching. This will then constitute the teaching objectives. Teachers need to think about what they are looking for in pupils in general and individually before



they teach. However, although, some assessment goals can be specified in advance, more or less precisely, others emerge during teaching (Satterly, 1989; Rowntree, 1991).

Sometimes teachers do not assess what they assert they assess. In an essay for instance, they may want to assess pupils' creativity and use of rich vocabulary but what they assess is spelling, syntax and tidiness of the pupils' work.

#### **2.4.6 Overview**

In this section, the content of assessments are examined. Overall, teachers believe that pupils' achievement should be evaluated in a number of different domains, namely behaviour, attitudes, knowledge and skills. They informally assess non-academic qualities, though it is very difficult even to define them. The weight they place on different qualities depends on the subject matter and the age-level of the pupils. Regarding learning objectives, there are two trends: relational and specific. Typically, teachers place more emphasis on products than on the processes of pupils' efforts. In the primary schools, teachers mostly assess the lower level of the cognitive domain. There is evidence that often teachers are not clearly aware of the lesson's objectives. This shows the necessity for teachers to be conscious of what goals they are pursuing in a given teaching unit so as to enhance their teaching effectiveness.

The next section explores teachers' responses to the positive and negative efforts of children and their consequences.

## **2.5 Teachers' Response to Pupils' Efforts**

### **2.5.1 Introduction**

This section examines the nature and forms of teacher response to pupils' efforts, performance or behaviour which could be verbal or non-verbal, positive or negative, specific or general. It is also interested in the impacts of the various kinds of responses on children's learning.

In the light of this interest, the nature and the implications of feedback information which is based on the interpretation phase is examined. This is also related to the study's questions regarding the importance of assessment, teachers' awareness of its potential and provides evidence of current practice. Moreover, it deals with the classroom assessment's intended and unintended purposes; teachers' comments: forms and utilities, and the use of assessment results.

Feedback is an inseparable part of the assessment and learning process. A deeper understanding of its significance and function will help the interpretation of the study's data. Hence, it is important to consider the nature of feedback; the forms it takes; its effects on pupils and how it can be used more effectively to assist learning.

### **2.5.2 Nature of Teachers' Response**

Clement and Frandsen (1976) have pointed out that, despite the apparent simplicity of the concept, the literature suggests various interpretations of the term. It is therefore necessary to distinguish which one is appropriate for the teacher and to differentiate between feedback, criticism and teacher praise.



According to Ramaprasad (1983), feedback is information about the gap between the actual level and the reference level of a system parameter which is used to alter the gap in some way.

In daily classroom life, teachers inform their pupils how far away they are from the desirable outcomes. Often this information has positive or negative meaning encouraging a desirable outcome or discouraging an undesirable one. Praise and criticism reflect those two approaches.

In the classroom, feedback is provided either immediately at the end of an assessment period, or after a longer period. Simultaneous feedback has been systematically studied in two major formats. One used non-verbal messages and the other verbal messages to provide instantaneous feedback during teaching. Most studies suggest that pupils need to get feedback soon after their performance. When the time between the actual performance and the provided feedback is increased, its utility is decreased (Crooks, 1988).

### **2.5.3 Forms of Feedback**

Rowntree (1977) points out the various forms and degrees of usefulness of feedback, and notes that in its least useful form it comes as a mark or grade. A 45% or a C may give the pupils some hint as to whether or not their teacher thinks they are making progress, and they can compare their grade or mark with those of their previous tests. But it tells them neither what they have done to merit such a mark nor what they could do to get a better one. He believes that feedback is only useful when it includes verbal comments.

According to Zahorik (1968), feedback is provided in verbal/non verbal or written forms. The type of feedback used appears to be a function of the pupils' age level, the purpose of the part of the lesson in which it occurs, and many other factors in addition to the response.

When the feedback is really intended to contribute to the pupils' progress, it must tell them either that they have already achieved what they were trying to achieve or else must enable them to take further action towards achieving it (Birney, 1964).

#### **2.5.4 Verbal Feedback**

According to Zahorik (1968), teacher-verbal feedback is a very complex, persistent and pervasive behaviour during the teaching - learning process. It is related to several variables, only one of which is the value of the pupil response. This behaviour refers to those oral remarks of teachers which reflect on the correctness of the children's initiated statements in relation to subject matter development. It includes statements such as 'Fine' and 'O.K'. He also found that his sampled teachers used a wide variety of different types of feedback but only a small number of these were used with regularity. The most frequently used type of feedback was repeating the pupils' answer approvingly. The second most frequently used type was calling on a pupil to enlarge his/her response.

#### **2.5.5 Teachers' Praise**

Page (1958) found that simple positive comments are very beneficial and negative



criticism is predictably counterproductive. Those who benefit the most from praise are the younger ones.

In general, criticism is more potent than praise for bringing about change. This was the finding of a study which examined the consequences of teacher praise and criticism (Worrall, C. et al., 1983). Negative shift due to criticism was clearly greater than the positive shift due to praise.

The place of rewards in school: praise, grades, recognition of progress is crucial, and clearly they are used as incentives to encourage learning (Child, 1981). Sometimes the inherent interest in some aspects of school work is sufficient to arouse the children to cognitive activity but often it will be necessary to apply external stimuli.

Development in the area of extrinsic motivation owes much to findings in reinforcement theory, which has been one of the most researched areas of psychology (Child, 1981; Satterly, 1989). In its simplest form, the theory follows from Thorndike's 'Law of Effect' which tells us that if our efforts are rewarded with something we like to receive (positive reinforcement), we are more likely to repeat our efforts, and thus habits are born. This is in accordance with Skinner's (1969) basic principle that behaviour followed by positive reinforcement is likely to recur while that which is not is less likely to recur.

The use of tangible reinforcers such as 'stars', prizes, money or gifts is not new in primary schools. Consequently, several programmes have been devised which

start with external rewards of one kind or another and become transferred to cheap reinforcers (Child, 1981).

Although most educational psychologists stress the value of reinforcement of good behaviour or successful performance, and point to teacher praise as a valuable and desirable form of such reinforcement, Brophy (1981) drew results from his study sharply at variance with these common views. His main conclusion was that the meaning and function of teacher praise would depend not only on the verbal content, but on non-verbal accompanying behaviour which could either reinforce or contradict it, and on situation and context factors which condition pupil expectations about and perceptions of teacher behaviour.

There is evidence that teacher praise is a weak reinforcer at least after the first few years in school (Kohlberg, 1969). Moreover, children who are low in ability, who come from low socioeconomic backgrounds were more likely to be responsive to praise and encouragement from the teachers. With pupils who happen to be high achievers, praise may be not only ineffective but actually counter-productive (Eden, 1975). Teachers have not to be indiscriminately positive in their evaluative comments towards pupils but instead to pick their spots and choose their words carefully (Brophy, 1981).

Forness (1973) argues that effective praise can provide encouragement and support when made contingent on effort, can be informative as well as reinforcing when it directs the pupils' attention to genuine progress or accomplishment, and can help teachers establish friendly personal relationships with pupils. Although



it is generally weak as a reinforcer, it is effective with many pupils and, for them, has several advantages over material rewards (Schultz & Sherman, 1976).

### **2.5.6 Written Feedback**

The extent of the written feedback (general and short; marks or grades or specific comments) and how it affects learning are also of interest for this study.

Page (1958) found that pupils who are given individualized verbal comments on their work, incorporating suggestions for improvement, do tend to improve significantly more than pupils who are given standard comments. When the average teacher takes the time and trouble to write comments like “encouraging” on pupils’ papers, these apparently have a measurable and potent effect upon pupils’ effort, attention or attitude.

There are several research studies supporting Page's (1958) theory that teachers' comments are a worthwhile instructional practice (Tyler, 1958; Campbell & Stanley, 1963; Pickup & Antony, 1968). But there are others who have failed to find consistent support for teachers' comments (Lindgren, 1967; Glock, 1971; Gage & Berliner, 1975; Graig et al., 1975).

Stewart & White (1976) presented the results of their own study and reviewed those of twelve others trying to replicate Page’s (1958) study of the effects of grades alone versus the effects of teacher comments and grades as forms of feedback. Their conclusion was that the positive effect obtained by Page may depend on the particular learning conditions and the nature of the teacher

comments. They suggested that there is no strong evidence to point out that any type of comment retains its effectiveness over an extended period of time and, where comments were effective, they were encouraging and personalised in nature rather than simple standard statements.

Written praise has a positive effect but it is considerably more effective when accompanied by specific comments on errors (Cardelle & Corno, 1985). This finding confirms the usefulness of teachers' comments on pupils' work. Krampen (1987) suggests that written comments should be content specific and take into account a pupil's concept of his or her own competence, otherwise the findings show that the teacher comments produce outcomes which may not be all positive.

### **2.5.7 Non-verbal Feedback**

There is a lot of this sort of feedback in primary schools. Teachers' smiles or scowls have a great influence on the pupils' behaviour. Gesture is the commonest form of non-verbal contact. It includes facial and body movements (Birney 1964; Argyle, 1978).

Jackson & Belford (1965) concluded that teachers continually assess and, as a consequence, change teaching styles and curriculum after close attention to the faces of the children. The joy of teaching came through the light in the eyes of the pupils. That light provided the feedback required for instantaneous re-planning.

According to Shipman (1983), much of classroom assessment is instantaneous and spontaneous. Teachers assess through their ability to detect understanding



and bewilderment, enthusiasm and boredom, minority and majority understanding. Sometimes it is assessment based on answers given, but it can be through the light in the eyes of the children, the waxing and waning of enthusiasm. As the teacher interprets signs from the children, there is an immediate curriculum development, changes in teaching style, emphasis, speed or topic.

Reward and punishment sound very grand terms in the primary school situation, for mostly they are small things like a smile or the raising of an eyebrow. Nevertheless, their function is important, namely, to enable the teacher to control the behaviour of the children (Roberts, 1983; Child, 1986).

### **2.5.8 Feedback for Learning**

Feedback is a key element in classroom assessment (Sadler, 1989). After studying the assessment results, pupils are provided with feedback information in terms of where, what and how they need to improve or practice. This is a very important issue because it acts as a motivation for further learning as well (Sutton, 1985; Jones & Bray, 1986; Lee, 1989; Gipps, 1990; Thomas, 1990; Airasian, 1996).

According to Rowntree (1991), the value of feedback, or 'knowledge of results' is the life-blood of learning. Having said or done something of significance - whether a physical action, a comment in conversation, or an essay in an examination - the pupil wants to know how it is received. He wishes to know whether he communicated what he intended to communicate, whether what he

said seemed right or wrong, appropriate or inappropriate, useful or irrelevant to his audience. And he may need a response fairly rapidly if it is to confirm or modify his present understanding or approach. Effective feedback enables the pupil to identify his strengths and weaknesses and shows him how to improve where weak or build upon what he does best.

Research on feedback on learning from classroom teaching has shown that feedback generally increases what pupils learned from reading assignments that included questions or tests for them to answer (Page, 1958; Karraker, 1967; Beeson, 1973; Strang & Rust, 1973; Ingenkamp, 1986).

Zahorik (1968) argues that teacher-verbal feedback is significant instructional behaviour which has a considerable effect on pupils' learning. The verbal feedback that teachers give, following a pupil's behavioural output, provides information for the child relative to the effectiveness of the behavioural output. Using this information, pupils can adjust and change their future output in terms of their goal.

One potentially useful way of enhancing motivation and learning may be the placement of comments on pupils' test papers (Leauby & Atkinson, 1989). They noted that comments had a more powerful effect for the pupils at the upper and lower positions of the class. As for the pupils of middle range, comments had an uninhibiting effect.

Radecki & Swales (1988) found that most of their English as a Second Language pupils reported positive or at least neutral reactions upon receiving a heavily



marked paper, whatever the nature of the markings. They declared that they would read the comments and even expressed satisfaction that their teacher had marked their papers. Most of the pupils also reported that they looked first at the grade on their returned paper rather than the comments, implying that initially the grade is of more concern to them. Furthermore, nearly all pupils revealed that they reviewed their corrected work only once or twice, immediately upon receiving it or before an examination.

One of the major benefits from feedback is the identification of errors of knowledge and understanding and assistance with correcting those errors (Kulhavy, 1977). In most studies, feedback improved subsequent performance on similar tasks (Crooks, 1988). According to Sadler (1989), pupils use feedback to monitor the strengths and shortcomings of their performance, so that aspects linked with success of high quality can be recognised and strengthened, and wrong aspects reduced or corrected.

The most effective form of feedback will depend on the correctness of the answer, the pupil's degree of confidence in the answer, and the nature of the task (Block & Anderson, 1975; Phye, 1979; Fredericksen, 1984). It is the comment in conjunction with a letter grade which would be more likely to improve pupil performance (Hammer, 1972; Stewart & White, 1976). However, in the light of the twelve replications of the Page study that Stewart & White (1976) reviewed, they wonder if writing comments on papers would be a worthwhile use of teaching time.

### **2.5.9 Feedback on Teaching**

Classroom assessment provides feedback to the teachers as to whether the learning objectives have been reached (Jones & Bray, 1986). Teachers who get feedback about how well they have taught, plan their teaching and remedial activities on the basis of that feedback (Black & Broadfoot, 1982; Sutton, 1985; Sadler, 1989; Wilson, 1989; Gipps, 1990; Airasian, 1996).

According to Rowntree (1991), as the assessment data reveal strengths and weaknesses in the pupil's learning, the teacher is able to identify where he has failed to explain a new concept, confused an issue or given an insufficient practice. Knowing where and how his pupils have had difficulty may enable him how to teach so as to remedy the situation.

Results of individual children can provide feedback to the teacher about both the child's progress and teacher's success (Black & Broadfoot, 1982; Satterly, 1989; Gipps, 1990). Frequent information about pupil performance is used as a basis for the design of teaching materials (Glaser, 1971; Lee, 1989; Thomas, 1990).

### **2.5.10 Significance of Feedback**

There are many reasons which are identified for assessment. On the one hand, assessment is for gathering information about a wide range of pupil characteristics as feedback for making decisions while, on the other hand, it is to provide information from which teachers can obtain insights into their effectiveness (Harlen, 1978).



Rowntree (1991) found that frequent grading and comprehensive assessment of pupils' work provide feedback information to the pupils as to how well they are doing in relation to others and in comparison to their own past performance.

Sadler (1989) indicates that feedback helps pupils to develop self-assessment skills, if the teacher provides detailed remedial advice and the pupil follows it through. This, however, maintains the learner's dependence on the teacher. The alternative approach is for pupils to develop skills in evaluating the quality of their work, especially during the process of production. The transition from teacher-supplied feedback to learner self-monitoring is not something that comes out automatically.

Bennet et al (1984) emphasise the importance of feedback that highlights what a pupil can do to remedy unsatisfactory results. However, this is a skill which many teachers find difficult because of the large numbers of children they teach, their own unfamiliarity with formative assessment approaches and the restrictions of time and resources.

Crooks (1988) stresses that feedback in the form of global grades has little effect on subsequent performance. Instead of the vague criteria that teachers frequently use, pupils need clear and explicit performance criteria which explain what they are expected to do. He also points out the significance of feedback in improving learning through the affective domain.

Educators who work on developing a better use of feedback suggest that to get the

best results of the situation the learner has to possess a concept of the standard being aimed for, compare the actual level of performance with the standard and engage in appropriate action which leads to some closure of the gap (Sadler, 1989).

Schunk (1984) suggests that with performance feedback the emphasis should be on informing pupils about their progress in mastery rather than on social comparisons. This is crucial for the less able pupils who might otherwise receive little positive feedback. Teachers need to be knowledgeable about the effects of various types of feedback and should consciously provide appropriate criticism.

Black et al., (1989) suggested that teachers have always to provide maximum feedback to children about their assessments, by relating subsequent teaching to those assessments or by making clear which qualities have been discerned and achieved and where effort is still needed.

### **2.5.11 Grading**

Grading is the process of judging the quality of a pupil's work or performance. It is the process by which scores and descriptive evidence are converted into marks or letters, i.e. grades, which indicate how well each child has learned (Airasian, 1996). Grades are a traditional and nearly universal means of documenting pupil achievement. Although pupils and parents place a substantial significance on grades (Rowntree, 1977), few teachers have had formal training for it (Hills, 1981). Grades are formal and important elements of a pupil's record. Grading is a difficult task for teachers because they wish to be objective and fair to all pupils.



Since a primary teachers know each child very well and the real problems they might face, this makes the objectivity of the grading difficult (Airasian, 1996).

As far as grading forms are concerned, teachers find it very difficult to find the best way to communicate children's progress in an effective and meaningful manner to the interested parties. Because parents and pupils are aware of the grading scales (1-10), (11-20), letter scales (A,B,C); descriptive scales, (excellent, very good, satisfactory, adequate); or (pass-fail), most of the education systems use such scales to communicate children's progress (Gronlund, 1976; Hills, 1981; Airasian, 1996).

According to Airasian (1996), grading serves three wider purposes: administrative, informational and motivational. Schools use grades administratively to determine pupils' rank in class, credits for graduation, and suitability for promotion to the next level. Informationally, grades are used to inform parents, pupils, and others about a pupil's performance. Grades summarize how well the children mastered the material taught during a term or a session (Rowntree, 1977) and are also used to motivate pupils to study (Airasian, 1996).

Except for serving as a measure of achievement, grades are an important medium for communicating with parents and within the schools. Such information can be used by parents to cooperate with the teacher and also to support and encourage their children (Wright & Wiese, 1988; Airasian, 1996).

Grades are the overt criterion for the evaluation of the curricula at national, local.

school, or class levels (Gipps, 1990). They are used as the basic information to guide and consult pupils for future studies and career selection (Fragos, 1984).

There are, however, certain criticisms which can be levelled at the grading system. Information is lost, because grades do not tell all that is known about the pupils' performance or abilities (Rowntree, 1991). Ebel (1982) argues that there are problems like the lack of a commonly accepted definition of what represents a mark, that often marks are used as a means of reward, or sanctions, so that sometimes marking becomes a vehicle of injustice instead of fairness.

Thorndike (1969) points out that grades often lack reliability, which makes meaningful comparisons across classes or schools difficult. He also notes that teachers use grades ineffectively and that grades are an inadequate means of communication. Such difficulties appear mostly at the elementary schools where grading systems use peer performance as a frame for reference and result in letter or number categories. The normative performance of previous pupils is the most meaningful standard in generating grades; however, this standard usually consists of an imprecise standard developed through teacher experience (Hopkins & Stanley, 1981; Wright & Wiese, 1988).

Opponents of grading criticise the abuse of grades as a punishment because pupils have not studied or because they do not obey the classroom or school's rules. Moreover, they dispute grading because it acts as rewarding by giving grades for rote learning and fostering the children's competitive and grade-hunting attitudes. There is also the subjective dimension in giving grades (Avdali, 1989).



Although motivation may be enhanced when performance is high, it may also be diminished when a grade is lower than the pupil expected. Frequent failures inhibit the joy that is related to learning; they limit the demands one puts for him/herself; pupils have doubts for their abilities and they are not confident (Airasian, 1996).

Grades make pupils winners and losers. The former are approved of and encouraged while the latter are disapproved of and discouraged. As a result, the good become better and the poor become worse. Grades create an atmosphere of competition instead of co-operation (Crooks, 1988).

Broadfoot (1994) reports that, in France, apart from the lack of genuinely formative assessment and guidance, a consideration of teacher assessment reveals the predominance of numerical marks despite widespread recognition that they are unconstructive and difficult to interpret because of the lack of objectives and criteria (Bottin, 1991).

### **2.5.12 Better Practices for Grading**

The previous debate constitutes strong evidence that marking and grading never can be totally fair since these approaches can only deal with limited and specific areas of school work and of the pupils by the teacher (Alexander, 1984). Hence the need for better practices for evaluating children's performance and work.

Dowling & Dauncey (1984) suggest talking about the matters with the pupil

immediately or encouraging the pupils themselves to write in evaluative comments or notes for future reference.

Some schools in the USA prefer parent-teacher conferences or the use of descriptive, criterion-referenced evaluation instead of the traditional report (Lemlech, 1984). In the U.K., many schools are moving towards more informative and open-ended ways of assessing pupils' progress which emphasise pupils' achievements rather than deficiencies and avoid rank orderings (Broadfoot, 1987; Reid et al., 1988; Pollard et al., 1994).

### **2.5.13 Overview**

This section explored the concepts of feedback and grading. Feedback is defined as information indicating the gap between the desirable goal and the current level of a pupil. It is useful for both the teacher and the pupil. It appears in verbal, non-verbal and written forms. It may be immediate or delayed. Specific comments are more useful than general descriptors, grades or marks. Praise seems to be favourable for younger pupils and low achievers. Feedback is of most value when it refers to an individual's own progress. Pupils need to get specific comments and help to identify their errors and guidance on how to correct them.

Despite the limitations inherent in grades, it is important to understand that grades are potent symbols in our society, symbols that count for pupils, parents and the general public. That is why they are used in most countries.



Having reviewed the relevant literature, the chapter which follows deals with the research methodology of the study. It discusses the uses and definition of a case study as a research strategy, its strengths and limitations and also how the data were collected, recorded and analysed.

## **Chapter Three: Research Methodology**

### **3.1 Introduction**

This chapter describes the methodology which was used to carry out the empirical part of this study. The first section examines the case study as a research strategy for this study, its strengths and limitations. The remaining sections describe the pilot study, sampling procedures and administrative arrangements used for the collection and recording of data, as well as the approaches to analysing and presenting the data.

### **3.2 The Case Study as a Research Strategy for this Study**

There are several basic research designs to choose from, each of which reveals something different about the phenomenon under study. The question of when to use a case study for research versus some other research designs essentially depends upon what the researcher wants to know, the definitions of the problem and the questions it raised. Bromley (1986) writes that case studies, by definition, get as close to the subject of interest as they possibly can, partly by means of direct observation in natural settings, partly by their access to subjective factors, whereas experiments and surveys often use convenient derivative data, e.g. test results, official records. Also, case studies tend to spread the net for evidence widely, whereas experiments and surveys usually have a narrow focus.

There are several “preconditions” which helped the researcher decide on the appropriateness of using a case study (Kenny & Grotelueschen, 1980). First, because the desired or projected objectives focus on humanistic outcomes as opposed to behavioural outcomes or individual differences. Second, because the



information from classroom teachers is not subject to truth or falsity but is subject to scrutiny on the grounds of credibility. In fact, the aim of a case study is not to find the 'correct' or 'true' interpretation of the facts, but rather to eliminate erroneous conclusions so that one is left with the best possible, the most compelling, interpretation (Bromley, 1986). Third, because of the uniqueness of the situation. At the time of this study, no such research programme could be located in Mauritius.

There are several other reasons for choosing a case study design when doing this particular piece of research. This is so because the objectives of this evaluation is to develop a better understanding of the dynamics of classroom assessment. When it is important to be responsive, to convey a holistic and dynamically rich account of that particular topic. Finally, because of the use of common language, as opposed to scientific or educational jargon, to enable the results of this study to be communicated more easily to anyone who is interested in educational assessment or similar areas.

These preconditions are congruent with the four characteristics of case study, namely: particularistic, descriptive, holistic, and inductive.

One of the major reasons for using a case study research design was the fact that it is also concerned with understanding and describing process more than behavioural outcomes (Foreman, 1948). A case study, Foreman argues, is particularly useful when the problem involves developing a new line of inquiry, needs further conceptualization of factors or functions, demands emphasis on the

pattern of interpretation given by subjects and involves determining the particular pattern of factors significant in a given case.

Process as a focus for case study research can be viewed in two ways. The first meaning of process is monitoring: describing the context and population of the study, discovering the extent to which the programme has been implemented, providing immediate feedback of a formative type, and the like. The second meaning of process is causal explanation: discovering or confirming the process by which the programme had the effect that it did (Reichardt & Cook, 1979).

Therefore, the importance of a process rather than an outcome was also another justification for selecting a descriptive case study for this particular research to help understand and shed light on classroom assessment processes in Mauritian primary schools (Sanders, 1981).

For this study, a case study of the descriptive type is chosen because most of the research questions have to do with 'how' and 'why' which are appropriate for case study strategy. Also, the researcher did not have control over the research situation and intended the end product to be a holistic, intensive description and interpretation of a contemporary phenomenon such as the classroom assessment process in Mauritian primary schools.

Another deciding factor is the fact that the case is an instance of some concern especially in the Mauritian education system and it is itself intrinsically interesting to be studied to achieve as full an understanding of the phenomenon as possible.



It would be, in Adelman et al., (1983) words, “*an instance drawn from a class*”.

Unlike experimental, survey or historical research, case study does not claim any particular method for data collection or data analysis. Any and all methods for gathering data from testing to interviewing can be used, although certain techniques are used more than others (Yin, 1994). Since case study as a research strategy that is qualitative in nature, was used in this study, data gathering and analysis techniques characteristic of qualitative research are emphasized. The decision to focus on qualitative case studies stems from the fact that this design is chosen precisely because the interest is in insight, discovery and interpretation rather than hypothesis testing.

The case study has in fact been differentiated from other research designs by what Cronbach (1975) calls “interpretation in context.” By concentrating on a single phenomenon or entity (“the classrooms”), this approach aims to uncover the interaction of significant factors characteristic of the phenomenon. As Yin (1984) observes, case study is a design particularly suited to situations where it is impossible to separate the phenomenon’s variables from their context.

### **3.3 Definitions of a Case Study**

The most frequently encountered definitions of case studies have merely repeated the types of topics to which case studies have been applied (Yin, 1994).

According to Schramm (1971), the essence of a case study, the central tendency among all types of case study, is that it tries to illuminate a decision or set of

decisions; why they are taken, how they are implemented and with what results.

A qualitative case study is an intensive, holistic description and analysis of a single instance, phenomenon or social unit. Case studies are particularistic in that they focus on a specific situation or phenomenon; they are descriptive and they are heuristic - that is, they offer insights into the phenomenon under study (Merriam, 1984).

Several writers have advanced definitions of the case study in a similar way. Wilson (1979) conceptualizes the case study as a process which tries to describe and analyse some entity in qualitative, complex and comprehensive terms not infrequently as it unfolds over a period of time.

MacDonald & Walker's (1977) definition of a case study as the examination of an instance in action is similar to Guba & Lincoln's (1981) statement that the purpose is to reveal the properties of the class to which the instance being studied belongs. Becker (1968) defines the purposes of a case study as twofold: to arrive at a comprehensive understanding of the groups under study and to develop general theoretical statements about regularities in social structure and process.

The case study can be further defined by its special features. Table 8 lists several case study characteristics from five separate sources. While the number of characteristics and the terminology may differ from source to source, a review of these suggests that the following four characteristics are essential properties of a qualitative case study: particularistic, descriptive, heuristic and inductive.



Particularistic means that case studies focus on a particular situation, event, programme, or phenomenon. The case itself is important for what it reveals about the phenomenon and for what it might represent. This specificity of focus makes it an especially good design for practical problems - for questions, situations, or puzzling occurrences arising from everyday practice. Case studies concentrate attention on the way particular groups of people confront specific problems, taking a holistic view of the situation. They are problem - centered, small scale, entrepreneurial endeavours (Shaw, 1978).

Descriptive means that the end product of a case study is a rich, "thick" description of the phenomenon under study. "Thick description" is a term from anthropology and means the complete, literal description of the incident or entity being investigated. It also means interpreting the meaning of demographic and descriptive data in terms of cultural norms and mores, community values, deep-seated attitudes and notions, and the like (Guba & Lincoln, 1981). Case studies include as many variables as possible and portray their interaction, often over a period of time. Case studies can thus be longitudinal. They have also been labelled "*holistic*," "*lifelike*," "*grounded*," and "*exploratory*." The description is usually qualitative - that is, instead of reporting findings in numerical data, case studies use prose and literary techniques to describe, elicit images, and analyse situations.

**Table 8: Characteristics of Qualitative Case Studies**

Helmstadter (1970)	Can be used to remedy or improve practices. Results are hypotheses. Design is flexible and can be applied to troubled situations
Wilson (1979)	Particularistic, holistic, longitudinal and qualitative
Guba & Lincoln (1981)	“thick” description Grounded, holistic and lifelike Conversation style format Illuminates meaning Builds on tacit knowledge
Stake (1981)	Inductive, descriptive, specific and heuristic. Multiplicity of data
Hoaglin et al (1982)	Specificity Description of parties and motives Description of key issues Can suggest solutions

They present documentation of events, quotes, samples and artifacts (Wilson, 1979).

‘Heuristic’ means that case studies illuminate the reader’s understanding of the phenomenon under study. They can bring about the discovery of new meaning, extend the reader’s experience, or confirm what is known. Previously unknown



relationships and variables can be expected to emerge from case studies leading to a rethinking of the phenomenon being studied. Insights into how things get to be the way they are can be expected to result from case studies (Stake, 1981).

‘Inductive’ means that, for the most part, case studies rely on inductive reasoning. Generalizations, concepts, or hypotheses emerge from an examination of data - data grounded in the context itself. Occasionally one may have tentative working hypotheses at the outset of a case study, but these expectations are subject to reformulation as the study proceeds. Discovery of new relationships, concepts, and understanding rather than verification of predetermined hypotheses, characterize qualitative case studies (Merriam, 1984).

There are several characteristics which have been developed to reflect the properties of the case study (Olson, 1982). It can:

- suggest to the reader what to do or what not to do in a similar situation.
- examine a specific instance but illuminate a general problem.
- illustrate the complexities of a situation - the fact that not one but many factors contributed to it.
- include vivid material - quotations, interviews, newspaper articles, and so on.
- obtain information from a wide variety of sources.
- spell out differences of opinion on the issue and suggest how these differences have influenced the result.
- present information in a wide variety of ways... and from the view points of different groups.

- explain the reasons for a problem, the background of a situation, what happened, and why.

Attempts to define case study often centre on delineating what is unique about the research design. The uniqueness of a case study lies not so much in the methods employed as in the questions asked and their relationship to the end product. Stake (1981) takes this notion one step further and claims that knowledge learned from case study is different from other research knowledge in four important ways. Case study knowledge is more concrete - case study knowledge resonates with our own experience because it is more vivid, concrete, and sensory than abstract. It is more contextual - our experiences are rooted in context, as is knowledge in case studies. This knowledge is distinguishable from the abstract and formal knowledge derived from other research designs. It is more developed by reader interpretation - readers bring to a case study their own experience and understanding, which lead to generalizations to be part of the knowledge produced by case studies. Finally, it is based more on reference populations determined by the reader. In generalizing, readers have some population in mind. Thus, unlike traditional research, the reader participates in extending generalization to reference populations (Stake, 1981).

### **3.4 Strengths and Limitations of Case Studies**

All research designs can be discussed in terms of their relative strengths and limitations. The merits of a particular design are inherently related to the rationale for selecting it as the most appropriate plan for addressing the research problem. One strength of an experimental design, for example, is the predictive nature of



the research findings. Because of the tightly controlled conditions, random sampling and the use of statistical probabilities, it is theoretically possible to predict behaviour in similar settings without actually observing that behaviour (Coolican, 1990). Likewise, if one needs information about the characteristics of a given population or area of interest, a descriptive study is in order. Results, however, would be limited to describing the phenomenon rather than predicting future behaviour.

One selects a case study design because of the nature of the research problem and the questions being asked. It is the best plan for answering one's questions. Its strengths outweigh its limitations (Yin, 1994). The case study offers a means of investigating complex social units consisting of multiple variables of potential importance in understanding the phenomenon. Anchored in real-life situations, the case study results in a rich and holistic account of a phenomenon. It offers insights and illuminates meanings that expand its readers' experiences. These insights can be construed as tentative hypotheses that help structure future research; hence, case study plays an important role in advancing a field's knowledge base. Because of its strengths, case study is a particularly appealing design for applied fields of study such as education (Denzin, N. K. & Lincoln, Y. S., 1994; Yin, 1994). Educational and assessment processes, problems and programmes can be examined to bring about understanding that in turn can affect and perhaps even improve practice. Case study has proved particularly useful for studying educational innovations, for evaluating programmes and for informing policy.

Field research better captures situations and settings which are more amenable to policy and programme intervention than are accumulated individual attributes. Second, field studies reveal not static attributes but understanding of humans as they engage in action and interaction within the contexts of situations and settings. Thus inference concerning human behaviour is less abstract than in many quantitative studies and one can better understand how an intervention may affect behaviour in a situation. Field studies are better able to assess social change than more positivistic designs, and change is often what policy is addressing (Collins & Noblit, 1978).

The special features of case study research that provide the rationale for its selection also present certain limitations in its usage. Although rich, thick description and analysis of a phenomenon may be desired, one may not have the time or money to devote to such an undertaking (Merriam, 1984). And assuming that one does take the time to produce a worthy case study, the product may be deemed too lengthy, too detailed or too involved for busy policy makers and educators to read and use. Some suggestions for dealing with reporting and disseminating case studies can be found in the literature, but the amount of description, analysis or summary material, is basically up to the investigator. Guba & Lincoln (1981) note an additional limitation of case study narratives: case studies can oversimplify or exaggerate a situation, leading the reader to erroneous conclusions about the actual state of affairs. Furthermore, they warn, readers can be seduced into thinking case studies are accounts of the whole: that is, they tend to masquerade as a whole when in fact they are but a part - a slice of life.



Qualitative case studies are limited, too, by the sensitivity and integrity of the investigator (Riley, 1963). The researcher is the primary instrument of data collection and analysis.

### **3.5 Selection of Schools**

In all, four schools were selected for this case study. The first stage of the selection process was to group all the primary schools in Mauritius into urban and rural regions. In the second stage of the process, the schools within the urban and rural regions were further classified as 'high' or 'low' performing schools according to their performance rates in the CPE examinations over the last three years. Schools with an average/percentage pass of over 60% in the CPE examinations were classified as 'high' performing whereas those with a percentage pass of 59% or less were classified as 'low' performing schools. The third stage of the process was the random selection of the schools, that is, two schools (one 'high' performing and one 'low' performing) from the urban region and another two (one 'high' and one 'low' performing) from the rural region.

A total of thirty - five teachers were selected from the four primary schools. All the primary schools in Mauritius have standards I – VI classes. Standards I being the class attended by pupils of five year olds and standards VI for eleven year olds. The selected teachers were those who were teaching in standards IV-VI. This is because the scheme of Continuous Assessment was only implemented in those standards.

The number of teachers in the three standards in each of the four selected schools

is shown in Table 9.

**Table 9 : Number of teachers in standards (IV-VI) in each school**

Standard	Schools			
	St George	Elizabeth	St Anne	Manor
IV	3	3	2	2
V	3	3	3	2
VI	4	3	3	4

There were thirty - five classes (standards IV – VI) in the four selected schools and one teacher was responsible for one class. For this piece of research, all the standards (IV – VI) teachers in the four selected schools were chosen.

It is worth pointing out that teachers of primary schools are all civil servants and they have to follow strict instructions or directives. Failure to do so can lead to disciplinary action and ultimately, dismissal from the service. These teachers are holders of at least 5 ‘O’ levels or equivalent qualifications. Some of them have two or three ‘A’ levels. The teachers follow a two - year Diploma course in teaching. After successful completion of the course, they start teaching in primary schools.

To ensure confidentiality, the names of schools and the assessment co-ordinators have been changed to St George School, Elizabeth School, St Anne School and Manor School.



By including, therefore, teachers from urban and rural regions, an adequate degree of representationality was achieved, since the teachers had many features common to the whole population; i.e. common initial training and National Curriculum, the same textbook for each subject and common directives.

### **3.6 Administrative Arrangements**

Permission was sought from the Ministry of Education, Science and Technology to have access to the schools before the start of the interview. This was followed by a number of visits to the selected schools for informal discussion with participants to discover those who should be interviewed in depth and to make arrangements for the interviewing time and place.

At the outset, the researcher's motives and intentions and the inquiry's purpose was addressed. The protection of respondents through the use of pseudonyms was also discussed. Prior to the interviews, the researcher spent some time observing the four selected schools and the teachers. In particular, the observation centred on: (i) the setting - what kinds of behaviour does the setting permit, the headteacher's office and the physical attributes of the various classrooms, (ii) the participants - who is in the scene, how many people and their roles, (iii) activities and interactions - what is going on and how people interact with the activities, (iv) frequency and duration of assessments and (v) other factors - informal and unplanned activities and nonverbal communication such as dress and physical space.

The interviews were conducted schoolwise, that is in each school, all the teachers

were interviewed together. The interviews took a number of weeks for each school. For each class, there were either two or three teachers. Only on one occasion, there was four teachers. This was because school A had four standard VI classes. Recording of the interview data was done by the use of a tape-recorder. The researcher made a lot of notes in the course of the interviews. The teachers also provided answers to questions in written form. This practice ensured that everything said was preserved for analysis.

### **3.7 Pilot Study**

Prior to the data collection, several research strategies were examined and carried out in a pilot classroom. The purpose of the pilot was twofold. First, it provided a method of training in a wide range of case study research instruments including observational note-taking, audio-taping discourse and transcription, follow-up interviewing techniques and piloting of interview schedules. This was done to improve the quality of the data collected in the case study schools. It also helped to clarify and develop the case study methodology in important ways.

The importance of the pilot study cannot be overstated. In terms of research training it was fundamental. Principally, note-taking techniques, use of the tape recorder, developing a researcher's role in the classrooms and interviewing abilities improved dramatically over the next few months. The pilot also precipitated a major change in research strategy which is described next.

Two major changes occurred because of the pilot study. First, it was determined that the role of the researcher should be more of an observer, rather than a



participant. Secondly, it was decided that the note-taking should focus on the core subject areas of Mathematics, Environmental Science and Language. This would enable the researcher to see how assessment information gathered by the teacher might feed forward into planning and feedback to the pupils. Thus, to provide a way of seeing the whole planning, teaching and assessment cycle, the data collection took place every day. Observing in the classroom every day also allowed the researcher to collect data on teaching strategies until practices were observed to be repeating and the data was yielding no new or clear variations of categories.

Interviewing the teachers about a plan they had prepared before a lesson, coupled with a post-lesson discussion about what they had perceived as the next step or which pupils had understood or learned the new concept, and then observing that feedback used in the teaching of the next lesson was necessary to see the entire assessment process. Again, for this reason, data collection took place every day.

Data collection at each school took place over a number of weeks. These included periods of observation in the classroom and follow-up interviews with the teachers and the assessment co-ordinators to gather data continuously over the course of a topic in each of the four core subject areas. To accomplish this, it was decided to repeat the observation/interview sequences as follows:

- Observe the teacher interact with the pupils using audio-tape and descriptive notes.
- Interview the teacher briefly at the end of the lesson or the day as to what happened in the encounter and what she learned from it, thereby confirming

and developing some consensus between the teacher and the researcher as to the content of the collected data, and at the same time investigating the teachers' thinking.

- Collect information as to the ways in which the teacher used or did not use the assessment information to plan and carry out the next academic experience for the pupils. In other words, was there any adaptation made to the next lesson as a result of the teacher's understanding and use of the pupils' demonstrated achievement?

After each day in the classroom, the researcher completed his notes and made tentative lists of ideas relating to assessment practices. These ideas were collected and divided into comments relating to: purposes of assessment, types of assessment tools, what was being assessed, recording techniques, teachers' responses and problems encountered during assessment exercises and the ways to overcome the problems

Daily memos and summary sheets were used to write up observation notes. In this way, patterns and new questions could be followed up the next day. Analysis of data occurred during the collection period and after.

Interviews took place so that the researcher could gather "descriptive data in the subject's own words so that the researcher can gather insights on how subjects interpret some piece of the world." (Bogdan & Biklen, 1982). A semi-structured interview schedule which contained factual, opinion and open-ended questions was used to ensure that the interview captured all the data necessary, but also



reduced the effects of bias. Adhering to the interview schedule as much as possible reduced the bias associated with the rephrasing of attitude questions, altering of factual questions and careless prompting and biased probes. It also prevented asking questions out of sequence or omitting them.

It is interesting to see what research says first, about the advantages and limitations of observations and interviews (the main approaches used in this study for data collection); and second, about the ways of analysing and presenting the findings. In the light of this reading, the researcher adapted his approaches for data collection and analysis.

### **3.8 Approaches used for Data Collection**

Evidence of the methodologies applied in classroom studies elsewhere, the questions of the present study, the restrictions of time, resources and staffing, led the researcher to decide that classroom observations and interviews were the most feasible approaches. Classroom observations were conducted in order to collect evidence about teachers' assessment practices, and children's reactions to them. This was supplemented by informal interviews and discussions with teachers and pupils.

The researcher felt that this combination would be the most effective for answering the study's questions. In particular, for revealing the pervasiveness and importance of assessment in the classrooms; for yielding evidence about the current assessment knowledge and practice of the sampled teachers and also any consequent issues, such as the constraints teachers face when assessing and their

suggestions for improvement. In general, the approaches used aimed to supplement one with the other, to counteract bias and to generate more reliable data.

### **3.8.1 Observations and Interviews: Strengths and Limitations**

Many researchers think that only by direct observation in the natural milieu can basic patterns of human behaviour be obtained (Galton et al., 1980; Woods, 1986; Hammersley, 1990). A direct observer can observe behaviour at the time of its occurrence which may be missed by using a questionnaire (Turney & Robb, 1971).

Observation is the most basic and direct approach for obtaining behavioural information and other instruments have their origins in observations made in the past (Burroughs, 1975; Wiersma, 1986).

Observational studies attempt to increase understanding of the reasons for differences between theory and reality, educational policy and classroom practice (Bogdan & Biklen, 1982; Wiersma, 1986; Woods, 1986). They focus upon events more than words and look first hand at interactions and behaviours.

However, the technique of observation has certain disadvantages. First, an observer may make faulty inferences from observations (Kerlinger, 1986). Different observers may view events in different ways, since perceptions are subject to distortions (Child, 1981). Second, the observer's presence might alter the subjects' behaviour (Turney & Robb, 1971; Engelhart, 1972; Harlen &



Qualter, 1991). Third, observation is time consuming and the researcher may gather data without obtaining anything really significant during the period of observation (Nisbet & Entwistle, 1970). Besides, every observational approach is subject to the bias, prejudice and value-judgements of the observer. As has been frequently said, the observer may select the events to observe and ignore others just as important (Harlen & Qualter, 1991). Some of the items might depend on the subjective judgement of the observer to allocate them in various categories. Even when several observers are used, it is not guaranteed that an objective judgement can be made. Thus, any account of a teacher's activities based on such items and neglecting contextual information would be misleading (Broadfoot & Osborn, 1987). There is an obvious need for supportive interview notes to supplement such observations.

The technique of interviews, like that of observation, has its strengths and weaknesses. The two major strengths of interviews are that the source of evidence is (a) Targeted - focuses directly on case study topic and (b) Insightful - provides perceived causal inferences. Some of the weaknesses of interviews are that they are time consuming, selective, inaccurate due to poor recall and reflexive – the interviewee gives what the interviewer wants to hear.

### **3.8.2 Conduct of Interviews and Types of Questions**

In this case study, data were collected through interviews and observation. The most common form of interview is the person-to person encounter in which one person elicits information from another (Merriam, 1984).

In qualitative case study research, the main purpose of the interview is to obtain a special kind of information. The researcher wants to find out what is in and on the teachers' mind (Merriam, 1984). According to Patton (1980) we interview people to find out from them those things we cannot directly observe like feelings, thoughts and intentions. We cannot observe behaviours that took place at some previous point in time. We cannot observe situations that preclude the presence of an observer. We cannot observe how people have organized the world and the meanings they attach to what goes on in the world - we have to ask people questions about those things. The purpose of interviewing, then, is to allow us to enter into the other person's perspective.

Once it was decided what data collection methods would be used, decisions as to what information was needed to address the problem and how best to obtain that information were considered.

The key to collecting good data from interviewing was to ask good questions. In this study, the researcher felt more confident where most of the questions were written out ahead of time in the form of an interview schedule. Working from the interview schedule allowed the researcher to gain the required experience and confidence.

There were many questions which were put to the respondents to gain an insight into classroom assessment in Mauritian primary schools. To discover teachers' more fundamental views regarding why they assess and their opinions on the roles of assessment in aiding teaching and learning, they were asked how assessment



helps teaching and learning. What are the purposes of teacher comments and how assessment results are used.

In an attempt to draw a picture of how teachers said they applied assessment in their day to day classroom practice, they were asked about the sort of assessment practices they applied, in what written forms they responded to pupils' work, how often they gave their own tests and for what purposes, and how often they made clear to their pupils the standards involved in a 'good' piece of work.

To get some insights into what teachers look for when they assess their pupils, the teachers were asked about the spectrum of pupils' characteristics which they mainly assess. Finally, they were asked to indicate the problems they faced in implementing the assessments.

### **3.9 Data Analysis**

Data analysis is the process of systematically searching and arranging the fieldnotes and other materials that researchers accumulate to increase their understanding of them and to enable them to present what they discovered to others. Analysis involves working with data, organising it, breaking it into manageable units, synthesizing it, searching for patterns, discovering what is important and what is to be learned, and deciding what will be told others (Bogdan & Biklen, 1982).

During analysis, the researcher looks to see whether any interesting patterns can be identified, whether anything stands out as surprising or puzzling. They go on

to ask how the data relate to what one might have expected on the basis of common-sense knowledge, official accounts, or previous theory, and whether there are any apparent inconsistencies or contradictions among the views of different groups or individuals, or between people's expressed beliefs or attitudes and what they do (Hammersley & Atkinson, 1983).

In this study, qualitative analysis was carried out in order to make the data comprehensible. The aim here was to present a general picture of classroom assessment in a typical Mauritian primary classroom within the context of the school.

The analysis concentrated mainly on identifying the meanings of the situations and the structure of events. Moreover, it attempted to explain individual actions in the light of the teachers' definitions and interpretations of the events (Wiersma, 1986). Hitchcock & Hughes (1989) see qualitative analysis as the attempt to organize, account for and provide explanations of data so that some kind of sense may be made of these. The researcher moves from description of what is the case to an explanation of why that is the case.

The basic idea of qualitative analysis was not so much to test a predetermined theory or hypotheses, but rather to generate ideas from the data. It involved the organization, sorting and coding of the data, together with the creation of some kind of system for the reproduction of information on specific themes from the mass of data (Bogdan & Bilken, 1982; Woods, 1986).



The term 'idiographic ethnographic analysis' that is descriptive of particular situations, here classroom assessments, was introduced by Woods (1986). This approach emphasizes the holistic nature of ethnography and the distinctive quality of information discovered which, in turn, is not covered by the hypotheses of statistical assessment. It does not in itself therefore, permit generalization though it might serve as a basis. There are no 'truths' to be discovered, or 'proofs' to be made (Woods, 1986); rather the goal here is a deeper understanding of interactions related to, in this case, classroom assessment in Mauritian primary schools.

Data analysis consisted of examining, categorizing or otherwise recombining the evidence to address the initial propositions of the study. It is, in fact, one of the least developed and most difficult aspects of doing case studies (Yin, 1994). Unlike statistical analysis, there are few fixed formulas which guided the present researcher. Instead, much depended on the investigator's style of vigorous thinking, along with the sufficient presentation of evidence and careful consideration of alternative interpretations.

Such an observation has led some to suggest that one approach to successful analysis is to make case study conducive to statistical analysis - by coding events into numerical form. Such "qualitative" case studies are possible when one has an embedded unit of analysis within a case study (Pelz, 1981) but this approach still fails to address the needs of doing analysis at the level of the whole case (Yin, 1994). Another suggested approach has been to use various analytic techniques such as putting information into different arrays, making a matrix of categories

and placing the evidence within such categories, creating data displays - for examining the data, tabulating the frequency of different events and putting information in chronological order (Miles & Huberman, 1984).

Yin (1994) proposes having a general analytic strategy, the ultimate goal of which would be to treat the evidence fairly, to produce compelling analytic conclusions, and to rule out alternative interpretations. His suggestion for two such types of strategies are: (a) development of a case description and (b) relying on theoretical propositions. The latter strategy is the most preferred one, where the original objectives and design of the case study are based on such proposition which, in turn, reflect a set of research questions, reviews of the literature and new insights. And it is these propositions that may shape the data collection plan.

This section described the approaches used for data collection. The next section concentrates on how the data were analysed. There is a deliberate attempt not to devote a separate section to data analysis since collection of data and analysis are a simultaneous process in qualitative research (Goetz & LeCompte, 1984).

For this study, analysis was a two - stage activity: analysis during data collection and analysis after data collection.

### **3.9.1 Analysis during Data Collection**

At the outset of the qualitative case study, the problem was known and the case that was going to be studied in order to address the problem was defined. But there was no knowledge as to what would be discovered, what or whom to



concentrate on or what the final analysis would be like. The final product of a case study was shaped by the data that were collected and the analysis that accompanied the entire process. Without ongoing analysis, the researcher ran the risk of ending up with data that were unfocussed, repetitious and overwhelming in the sheer volume of material that needed to be processed. Data that have been analysed while being collected are both parsimonious and illuminating (Bogdan & Biklen, 1982).

In this study, several strategies were used to analyse the data during data collection and these are as follows: (i) making decisions to narrow the study. Discipline oneself not to pursue everything or else run the risk of ending up with data too diffuse and inappropriate. The more data one had, the easier it was to think deeply about it and the more productive it was likely to be when final analysis was attempted; (ii) making clear in one's mind to do a full description of a setting; (iii) bringing general questions to the study. These were important because they gave focus to data collection and helped organize it as one proceeded. Also to assess which of the questions were relevant and which ones had to be reformulated to direct one's work; (iv) planning of data collection sessions according to the findings from the previous observations; (v) writing many comments as one went. The idea was to stimulate critical thinking about what one saw and to become more than a recording machine; (vi) writing memos to oneself about what one was learning. These memos provided a time to reflect on issues raised in the setting and how they related to larger theoretical, methodological and substantive issues; (vii) trying out ideas and themes on subjects. While not everyone was asked, and while not all one heard was helpful.

key informants, under the appropriate circumstances, helped advance analysis, especially to fill in the holes of description; (viii) going through the substantive literature in the field of classroom assessment to enhance analysis during the data collection phase.

Data collection and analysis is indeed an ongoing process that can extend indefinitely. There was almost always another person/teacher who could be interviewed, or another observation that could be conducted. When should the researcher stop this phase of the investigation and begin intensive data analysis? The answer depended on time and running out of mental energy (Lincoln & Guba, 1985). The four guidelines which were used to end the data collection phase of the study were: exhaustion of source, saturation of categories, emergence of regularities and over-extension.

### **3.9.2 Analysis after Data Collection**

Once a decision was reached to end simultaneous data collection and analysis, the information was organized so that intensive analysis could begin. Yin (1984) calls this organization the case study data base, which he differentiates from the case study report. In a similar fashion, Patton (1980) differentiates the case record from the final case study. The case record is pulled together and the voluminous case data is organized into a comprehensive primary resource package. The case record which has to be complete but manageable includes all the major information that is going to be used in doing the case analysis and case study. Information is edited, parts are fitted together and the case record is organized for ready access either chronologically or topically.



Analysis of the data was by reading through the field notes and materials, determining what issues and features consistently emerged and what themes appeared more often than others. During this long process, specific patterns, topics and categories (Hitchcock & Hughes, 1989) of activities and events were revealed.

The data conveyed some of the richness and variety of what went on in observed Mauritian primary classrooms in terms of assessment. They also assisted the search for patterns deriving from these assessments, helping to explain why certain teachers did one thing while others did something else.

The overall goal of the analysis was first, to describe classroom assessment practices, why assessment was conducted and what was assessed. Second, to find out what problems are encountered during assessment and how these are resolved and third to identify any patterns of assessment.

Because these teachers may not be representative of the general Mauritian primary teacher population and because the practices described reflect what teachers said they did - not necessarily what they actually did - inferences about the assessment practices of Mauritian primary teachers in general are not justified. And anyway, this is not the idea behind the use of a case study strategy. Nevertheless, there is a value in setting out teachers' views, since their characteristics and also their schools are *prima facie* typical at least. Moreover, they were expected to implement the same educational policy.

Obviously, no legitimate attempt can be made from these data to make generalizations. However, overall the findings of this study may be suggestive of trends and approaches that could lend themselves to a more precise definition of variables in the future. It is in that explanatory vein that the following report of the findings and their interpretations was made.

In Part II of this report, the findings are presented. Before presenting the findings, however, a brief description of the four selected primary schools for this case study is given, in order to facilitate the understanding of the various processes of assessment in Mauritian classrooms.



## **Part II: Research Findings**

### **II. 1 Introduction**

Assessment in the classroom is an integral part of the teaching and learning process and teachers are constantly assessing every aspect of pupils' performance and attitudes, with various implications for their progress (Broadfoot, 1979; Shipman, 1983; Stiggins, 1985; Satterly, 1989; Rowntree, 1991; Airasian, 1996; Pollard et al., 1994).

Observational data which were collected as part of this study are designed to supplement the interview data and provide first - hand evidence of the assessment implications on pupils expressed in their views.

Observational findings are directly related to the study's questions of exploring the classroom assessment phenomenon, in terms of collecting evidence of teachers' current practice. These also show that it is important for teachers to be aware of the potentials of classroom assessment to assist teaching and learning. Classroom interactions and assessment activities are phenomena which are too complex (Airasian, 1996). This is why this part of the report is presented in three Chapters and in one Appendix (because of thesis length), each presenting the findings of the four schools exploring the concept of classroom assessment: the purposes of assessing pupils, how this activity is undertaken and what is assessed.

Descriptions are accompanied with illustrative quotations from teachers deriving from the interviews and also supported with reference to the relevant literature evidence discussed in the previous chapters. This sort of presentation aims at

enabling the reader to gain a clearer understanding of the situation in the classrooms, when bearing in mind the interactions and activities that take place and the factors revealed from the discussion of the data.

The findings presented in this part of the report are based on the information gathered during the three terms in 1998 from the teachers of the four selected schools.

Four case studies are presented, one for each school. Case studies of St George, Elizabeth and St Anne are found in Chapters Four, Five and Six while a case study of Manor school is found in Appendix B.

Presentation of the results of the interview and observational data are similar for Chapters four to six and Appendix B. For each case study, the results of the findings are presented in two parts. The first part gives the results of the interview data, while the second part presents results of observations of the assessment co-ordinator in action. The idea here is to find out if what teachers say is what they actually do.

The observation of classroom assessment has followed the framework of assessment cycle initiated by Natriello (1987) which parallel three phases of teaching: planning (setting learning goals), teaching (setting of tasks through instruction and teaching) and assessing (appraising and feedback). Accordingly, the analysis of the observation data are presented in the following order: planning, teaching and assessing.



A summary of the main findings and the conclusion of the study is found in Chapter Seven of this report.

For reasons of anonymity, the names of the teachers and those of the pupils appearing in the report have not been mentioned. The idea here is not to present what teachers of a particular class, sex or age do in the classroom but to explore and give a general picture of the classroom assessment processes in the four selected primary schools.

But before presenting the findings, a brief description of the four selected primary schools for this case study is given in order to facilitate the understanding of the various processes of assessment in Mauritius.

## **II. 2 The Four Selected Schools**

The four schools selected for this case study are St Anne and Elizabeth schools from the urban regions and St George and Manor schools from the rural regions. St George and Manor schools were the two high performing schools.

Most of these schools are either one - or two - story buildings catering for around 300-600 pupils of ages between five and eleven years. These schools are staffed by teachers who have followed a two-year course of teacher training at the Mauritius Institute of Education leading to a Teachers' Diploma or Certificate. Apart from the teachers, there is also a clerk who looks after administrative matters and a number of non-teaching staff whose responsibilities are the maintenance and upkeep of the premises and grounds.

All the schools observed are surrounded by gardens which are well looked after by the non-teaching staff and the pupils. Apart from the garden, there are also a playground for pupils to take part in various sports activities and a canteen from where refreshments and sandwiches can be bought.

In a wider space at the main entrance are several school notice-boards on which are displayed information about the school's timetable, the names of the teachers and the classes they have responsibility to teach, the times of visiting the schools by parents, information of forthcoming events and what to do in case of emergency. Next to that wide space is found the headteacher and the deputy headteachers' office. The clerk has a desk in the headteacher's office.

All the schools have a 'library', which is basically some bookcases with children's books which the pupils can borrow for the weekends. Physical education and assemblies are held weekly normally on Mondays in the playground if the weather is fine.

The headteacher is responsible for the administration of the school. In his/her absence, the deputy headteacher takes that role, while the inspector who visits the school very regularly has more pedagogical responsibilities. The teachers are responsible for the classes and teach the core subjects, that is English, Environmental Studies, French and Mathematics. Pupils moving from standard IV and upwards have the same teachers, normally.

The average class size is around thirty-five pupils. The teaching session is fifty-



five minutes, with a ten minute break in between. The schools operate five days a week from 8.45am to 3.10pm.

In the classrooms, pupils' desks are in rows facing the teacher's desk. This allows him/her to observe all his/her pupils and maintain some element of control. In general, most of the classes are plain and well decorated with pupils' work or the map of Mauritius. At the front of the class, beside the teacher, is fixed a blackboard which is the basic teaching tool in Mauritian primary classrooms. On both sides of the classroom, there is a notice board on which examples of pupils' drawings, creative writing and the marks they have attained in various subjects are neatly displayed. During the teaching sessions, pupils are not allowed to walk in the classroom or speak unless permission is granted.

The classroom environment of the observed schools can typically be characterised as a setting which communicates to pupils their status as passive learners of important socially valued knowledge (Starida, 1990). That is, they are obliged to learn externally imposed knowledge, which they do not choose and assessment procedures gauge how far they digest it. Obviously, this indicates an absolute control on pupils' learning and a traditional pedagogy.

The blackboard is the centre of the pupils' attention for five hours daily and the decoration of the walls stresses the scholastic content of classroom life. The teacher's role is predominant in this context and symbolises the source of skills and knowledge.

The pupils' task, on the other hand, is continuous individual work in order to master knowledge and skills, which are the subject of classroom assessment that this study explores. The fact that all pupils face similar classroom environments is another feature of the equality the system claims is provided to all pupils. Another profound feature of classrooms observed is that their environment is scholastically oriented and it ignores the social and cultural life outside the school.

Planning of the lessons is done individually and not discussed with other colleagues. Since classes are considered as homogeneous groups, teachers prepare the same tasks for all the pupils irrespective of whether they are in low or high ability groups. Pupils are expected to be silent in class, speaking after teacher's permission (another indication of teacher's control).

The typical teacher will stand in front of the class to teach or give some kind of explanation. Most of the time, the blackboard is used as the main visual aid. An interesting point is that such a didactic style extends to all subjects. The typical teaching style can be characterised as teacher-centred pedagogy. Even in areas where the pupils have to develop their creativity and imagination, such as art, craft or poetry, they have to imitate either the teacher-made models or to recite famous poetries.

### **II. 3 In the Schools**

Sitting to the side at the rear of the classrooms, where it is possible to see and hear all that goes on, the researcher tried to grasp as more, and as fully as possible, the assessment events taking place. Entering into classroom activities was avoided



and there was no interaction with the teachers and pupils. Although, as it was planned, the focus was on tests, textbooks tasks, teachers' verbal comments, written comments, grading, marking and recording approaches that teachers use, from the first sessions it was felt that many other activities of the assessment types were taking place in the classrooms at a very fast speed. The researcher was faced with numerous evaluative interactions such as those concerning the management of the class for keeping smooth the flow of instruction and from formal assessments such as written tests or embodied in textbooks tasks, to the many informal ones, such as the continuous questioning, observations of performance, listening to pupils' reading and many others. Moreover, covert assessment interactions conceived such as the different tone of teachers' voice when asking a question or responding to a pupil's initiative and the assessments teachers make by scanning their pupils' eyes to see if they have understood the materials taught.

All these raised serious questions in the researcher's mind about what are eventually more important to record and how this might be undertaken? Should it be teachers' questions, praise, criticism or non-verbal assessments? Who is assessing whom? Are the teachers assessing the pupils or the pupils assessing the teachers? What about the class reactions? Were they to do with the effectiveness of the teachers' teaching or for pupils' learning efforts and ability or both?

Teachers decided, sometimes immediately, sometimes after a short or longer delay. Often assessments concerned behavioural grounds and sometimes the affective domain of pupils' personality. Soon it became difficult for the researcher to keep track of all those assessment interchanges. This complexity

and plethora of information which accompanied classroom assessment resulted in the gradual accumulation of a vast bulk of notes. As Woods (1986) notes, “a classroom is a miniature of the real life full of ambiguities, inconsistencies, general messiness and illogicalities”.

Gradually, meanwhile, a progressive focusing on specific episodes started and regularities of assessment events appeared. This in turn came to act as the prime agency of selection in what to observe and what to record. Common assessment episodes occurred in every classroom, differing slightly among them. From these events, typical patterns of action emerged which constructed the framework of the assessment events categorisation.

The chapter that follows describes the results of the interview and observation data in case study, St George school.



## **Chapter Four: Case Study – St George School**

### **4.1 Introduction**

St George school is a high performing school located in the rural area of the North. The two - storey building has several separate classrooms, gym, library and a hall. There were 636 pupils on the school roll and they came from various socio-economic and ethnic backgrounds. The majority of the pupils were of Indian background. Most of the pupils spoke two languages according to the assessment co-ordinator who also indicated that a lot of importance was laid on academic achievement. He said “we try our best so that our pupils are ranked high in the CPE examinations”. The school staff included one headteacher, three deputy headteachers (one for the Oriental Languages) and twenty - five teachers who were all employed on a full-time basis by the Ministry of Education and Science.

The school did not have a written assessment policy as such. However, the teachers at this school had attended a one - day course in assessment at the Mauritius Institute of Education. The school staff had devoted several meetings to the topic of assessment, including a moderation meeting to discuss and assess samples of work. The notes of minutes provide a good source of evidence as to the teachers’ feelings about developing new assessment skills.

#### **First meeting:**

- Assessing sample of pupils’ work on an individual basis.
- Working in groups to agree on levels of achievement for each sample.
- Discussion of groups’ assessments.

### **Outcome of the First Meeting and their Conclusions:**

- Difficulty in assessing samples of work without knowing what went before, instructions given by the teacher or the context for the sample of the work.
- Working together in groups helped teachers to share ideas and focus on the important parts of the work.
- Need for more evidence/samples of work to be able to form accurate assessments.

At another meeting, the headteacher outlined his views on assessment where many aspects of assessment were criticised but gave no concrete suggestions that could be used in class. The minutes talked about the establishment of assessment as a constant feature of classroom procedures in relation to: teacher assessment and attainment targets. Teachers discussed what exactly is evidence, as well as formative and summative assessment and records of achievement. They also discussed planning: how it could be streamlined and or put together in assessment.

The above observation implied that the teachers at this school were at the initial stage of developing ideas on classroom assessment skills at the classroom and school level.

The headteacher who had also attended the one-day course at the Mauritius Institute of Education, felt that the school had been working hard on planning but it did not feed into assessment at all. What he wanted to learn was how to conduct better teacher assessment while coping with thirty-five pupils in the class.



He had heard about observation strategies but felt that the pupils at his school were so disadvantaged, they needed constant supervision and that such strategies were not possible. He felt checklists or a scheme of assessment that could be carried on while correcting and teaching was what this school wanted.

The headteacher, who had been a teacher for twenty years, had been involved in the development of school effectiveness. He said he had been appointed to his previous school to bring the school to a good standard. To achieve this, he was sent on a training course in teacher development. He was responsible for the writing of school policies on assessment and curriculum and also helped in the implementation of the changes. He was placed at St George school to do the same kind of staff development. He explained that to effect change one has to be very careful and teachers have to be on your side. He believed that teachers should formalise what they do and be more accountable so that there is a base for teachers to work from. He was of the opinion that the major weakness of the curriculum was the fact that it was too prescriptive and there was too much to cover. It was also more knowledge-based rather than skilled-based. He noted that his teachers felt great pressure from the curriculum with not enough time to plan. He reported that his role was to help in the planning and facilitating of the changes. He believed that the appraisal of the teachers should form part of this implementation. His comment might explain why the relationship between the teachers and the head appeared under strain at this school. In the other case study schools, the headteachers reported that part of their work during the implementation of the curriculum and the change necessitated by it, was to protect their teachers from too much change too fast, whereas this headteacher was

concerned with appraising and evaluating teacher performance while they were in the process of making the changes. The teachers felt judged rather than protected by their headteacher. Though he had studied the change process, he had not been, thus far, very successful in helping his teachers see the need for change. As a result, they were wary of any new policies. They interpreted the headteacher's requirements of one staff meeting a week and the policy of handing in weekly plans as a means of checking up on them. One teacher remarked that they saw the presence of a researcher studying assessment as yet another example of the headteacher's intent to watch and control them. The headteacher himself assessed the reading of each pupil in the school. He kept his own notes of the assessment and used the information to see how the school was doing, in other words, for summative purposes. He said he did share the information with teachers if there was a problem.

The assessment co-ordinator said that "assessment at class level is our policy". There were ten teachers in standards IV, V and VI at this school. There were three teachers each in standards IV and V, while standard VI had four teachers. One teacher from the ten teachers acted as the assessment co-ordinator. At interview, the teachers were asked a series of questions on why they were doing assessment, how they were doing assessment, what they were assessing and whether they faced any problems during this exercise, and if so, how did they resolve them. There were further questions on the use of the Learning Competency document for planning daily lessons, deciding on pupils' achievements, diagnosing pupils' strengths and weaknesses and whether their teaching methods had been influenced by the use of the Learning Competencies



document.

Overall results are summarised in tables of frequencies. Percentage totals exceed one hundred in tables since multiple responses were possible.

After the interview, the assessment co-ordinator was observed. This was done to explain what he believed to be his classroom assessment practices and the influences which have shaped his thinking and work. The observational data was used to confirm or question his self - report.

#### **4.2 Results from the Interviews**

The literature review showed that assessment in the classroom is an integral part of the teaching and learning process. Teachers constantly assess every aspect of pupils' performance for various reasons (Broadfoot, 1979; Shipman, 1983; Stiggins, 1985; Satterly, 1989; Rowntree, 1991; Airasian, 1994; Pollard et al., 1994).

Data were collected by observing the assessment co-ordinator as part of the study to supplement the semi-structured interviews data and also to provide first - hand evidence of the classroom assessment practices. Such evidence was not available from the interviews. These observational data might verify or dispute what teachers assert they do when they were interviewed. In other words, these data will indicate whether what they said they did was what they actually did during the assessment phases.

Since classroom interactions and assessment activities are too complex phenomena, chapter 4 attempts to present those observed in a rather summarised and organised manner. There will be several excerpts (short/long) from the observations to indicate why teachers were assessing, how they conducted assessment and what they assessed.

It is hoped that this kind of presentation will enable the reader to have a clear understanding of the practices involved in these situations. But before presenting the observational data, results of the semi-structured data are presented in tables 10 to 14 to get the views of all the teachers of St George school.

**Table 10: Purposes of Classroom Assessment**

Purposes of classroom assessment	Responses (N=10)			All Teachers (%**)
	Teachers Std IV	Std V	Std VI	
To provide feedback to the pupils	1*	2	4	7 (70.0)
To diagnose pupils' difficulties	1*	0	2	3 (30.0)
To evaluate the lessons	2*	2	0	4 (40.0)
To monitor the progress of pupils	2	2	4	8 (80.0)
To stress the main concepts	0	2	0	2 (20.0)
To communicate information to the parents	1*	1	0	2 (20.0)
To provide feedback to the teacher	1	2	4	7 (70.0)
To motivate the pupils	1	1	3	6 (60.0)
To provide remediation	2	2	4	8 (80.0)

\* includes the response of the assessment co-ordinator

\*\* Total percentages exceed one hundred since teachers could provide more than one response.



Teachers were asked why they assess their pupils and the roles of assessment in aiding teaching and learning. Table 10 gives the responses of teachers of case study, St George school for the research question: “why do you do classroom assessment?” Table 10 shows the importance teachers place on assessment and their awareness to assist learning which are indicated by the wide range of assessment purposes mentioned by the teachers. They said they assessed for various reasons: Feedback to the pupils and teachers, monitoring of pupils’ progress, providing remediation, motivating pupils, diagnosing pupils’ difficulties, stressing the main concepts and communicating information to the parents.

Around seventy to eighty per cent of those interviewed said they did assessment to provide feedback to themselves and to the pupils, monitor progress of the pupils and provide remediation to the pupils. Sixty per cent of the teachers said they did it to motivate the pupils. Twenty per cent of those interviewed mentioned communicating information to parents and stressing the main concepts while thirty per cent of them mentioned that the purpose was to diagnose pupils’ difficulties.

Four out of the ten teachers also said that they do assessment to evaluate the lessons. Diagnosis of pupils’ difficulties was mentioned by two standard VI teachers while stressing the main concepts were mentioned by two teachers of standard V. Two teachers (from standards IV and V) said communicating information to the parents was one of the purposes.

There were four main reasons for the assessment co-ordinator to assess his pupils: to provide feedback to the pupils, to diagnose pupils' difficulties, to evaluate the lessons and to communicate information to the parents.

These are some of the comments made by teachers for doing classroom assessment.

*"I am constantly on the lookout for pupils who are having learning, emotional or social problems."*

*"I try to identify pupils' problems by observing their performance and behaviour."*

*"Doing this help me to identify each pupil's difficulties and help them to learn the things not mastered before the next lessons are due and also help me to assess my own performance and the effectiveness of my teaching methods so as to find improved ways of teaching."*

*"Classroom assessment motivates my pupils. This results in them trying harder."*

*"The pupils want to know how their teachers respond to their contribution to the classroom discussion, participation and their attitudes during the lessons."*

*"One of the purposes of assessing my pupils is to make judgments about their academic performance. I like to know whether the pupils have mastered what was taught to them."*

*"When I noted very few hands raised for the seven-times table, this was a diagnostic feedback for me that something had gone wrong with my teaching. Hence, my decision to repeat the seven-times table."*

In an attempt to find out how the teachers conducted classroom assessment, they



were asked what sort of assessment practices they applied and also whether they gave homework and teacher made tests.

An open-ended type of question was put to the teachers to give them an opportunity to describe as many assessment practices as they apply in the classroom setting. Table 11 gives the teachers' responses to the second question. The results of the table suggest that a wide variety of assessments related practices were applied by the teachers.

**Table 11: Conduct of Classroom Assessment**

Classroom assessment practices	Responses (N=10)			All Teachers (%**)
	Std IV	Std V	Std VI	
Close observation of a pupil working	2*	2	4	8 (80.0)
Questioning at the end of a lesson to evaluate the instruction	0	2	2	4 (40.0)
Questioning during instruction to check if pupils have understood	3*	2	2	7 (70.0)
Homework	0	0	4	4 (40.0)
Workbooks	0	0	4	4 (40.0)
Comments	0	0	3	3 (30.0)
Tests	1	2	4	7 (70.0)
Correction of work	2	2	4	8 (80.0)

\*includes the response of the assessment co-ordinator

\*\* Total percentages exceed one hundred since teachers could provide more than one answer.

Questioning during instruction to check if pupils have understood, close observation of a pupil working, correction of work and tests were the four most important ways to conduct classroom assessment. All the standard VI teachers

said they made use of workbooks and gave homework. Four of the ten teachers (two from standard V and two from standard VI) interviewed, said questioning at the end of a lesson to evaluate the instruction.

The assessment co-ordinator said he conducted classroom assessment by close observation of a pupil working and questioning during instruction to check if pupils have understood the lessons.

**Table 12: What was Assessed**

What was assessed	Responses (N=10)			All Teachers (%**)
	Std IV	Std V	Std VI	
Process	3*	3	4	10 (100.0)
Product	3*	3	4	10 (100.0)
Mastery of the Basics	3*	3	4	10 (100.0)
Affective Domain	2	3	4	10 (100.0)
Social Domain	2	0	0	3 (30.0)
All round development	0	0	0	0 (00.0)

\* includes the response of the assessment co-ordinator

\*\* Total percentages exceed one hundred since teachers could provide more than one answer.

An attempt was made to get an insight into what teachers look for when they assess their pupils. All the ten teachers in this school said they assessed process, product and mastery of basics and the affective domain. Two out of the ten teachers said they also assessed social domains. The assessment co-ordinator said he assessed process, product, and mastery of basics.

Teachers were asked to indicate the problems they faced in implementing classroom assessments to find out any rationales on which they base assessment -



related views. Table 13 summarises the results. Out of the ten teachers, nine said the problem faced by them during assessment are difficulty in assessing several pupils simultaneously. To deal with this problem, teachers said they grouped their pupils in four or five, while others stayed after school hours to complete their assessments of their pupils. Others suggested the reduction of time spent on the syllabus. Six out of the ten teachers said the Ministry was a major problem while forty per cent of the responses indicated personal reasons.

**Table 13: Problems Faced by Teachers during Assessment**

Problems faced by teachers during assessment	Responses (N=10)			All Teachers (%**)	
	Std IV	Std V	Std VI		
Lack of time to assess all the pupils	2*	2	4	8	(80.0)
Lack of formal training	1	0	0	1	(10.0)
Difficulty in assessing several pupils simultaneously	2*	3	4	9	(90.0)
Disruptions	1	0	2	3	(30.0)
Noises	0	1	1	2	(20.0)
Personal reasons	1	1	2	4	(40.0)
Ministry	1	2	3	6	(60.0)

\* includes the response of the assessment co-ordinator

\*\* Total percentages exceed one hundred since teachers could provide more than one answer.

Eight out of the ten teachers said lack of time to assess all the pupils. In these cases, they said they gave the pupils plenty of homework on the relevant topics to be marked the next day. Just one teacher mentioned either disruptions, noises or lack of formal training. In this case, they suggest postponing the assessment and having relevant assessment training.

The assessment co-ordinator said he faced two problems doing assessment: difficulty in assessing several pupils simultaneously and lack of time to assess all the pupils. To deal with these problems, the co-ordinator said he gave them homework and did the marking with the pupils when time is available.

**Table 14: Use and Influence of Learning Competencies Document**

Use and Influence of Learning Competencies Document (N=10)	English	EVS	French	Mathematics
	Teacher	Teacher	Teacher	Teacher
To plan my daily lessons	9*	9*	9*	9*
To decide on a child's achievement	10*	10*	10*	10*
To help diagnose a child's strengths and weaknesses	7	6	7	8
My teaching methods have been influenced by the use of the document	10*	10*	10*	10*

\* includes the response of the assessment co-ordinator

The teachers of St George school were also asked about their use and influence of Learning Competencies in their everyday assessment activities in the four core subjects.

Nine out of ten teachers used the Learning Competencies document to plan their daily lessons, while all the teachers use the document to decide on a pupil's achievement. Between six and eight teachers said they used the document to diagnose a pupil's strength and weaknesses.



All the teachers said that their teaching methods had been influenced by the use of the Learning Competencies document.

The assessment co-ordinator said he used the document to plan his daily lessons and to decide on a pupil's achievement. He also said that his teaching methods have been influenced by the use of the document.

This section presented findings from the teachers' (including the assessment co-ordinator) semi-structured interviews. However, these findings have to be treated with caution, since they express what teachers said, not necessarily what they actually did in their classroom. In order to cross-check the consistency of their words and deeds, the next section presents findings from actual observation in the classroom.

The next section presents findings based on the researcher's field notes gathered during the three terms of field work from direct observations. It will be interesting to see which classroom assessment practices the observed co-ordinator fulfilled when he was doing assessment.

### **4.3 Assessment Co-ordinator: Background**

The assessment co-ordinator was in his thirties and had ten years of primary teaching experience. He came from a nearby school. There were 33 pupils in his class on the date of the data collection. All the pupils were present. The co-ordinator had a number of pupils who needed help with their studies. He said that

he had very little academic support, although he did have the deputy head to help him one afternoon a week. The co-ordinator believed that the school must operate on very strict lines to maintain enough stability and correct behaviour from the pupils to accomplish any teaching at all. He complained that there were constant interruptions to his teaching which occurred without his consent or knowledge and that there was a lack of information from the headteacher.

During the first observation, when the Senior school Inspector came into the class, the teacher voiced his frustration that he did not get any warning about any visits. The co-ordinator appeared to have a poor rapport with the headteacher. He said that he and the other teachers were not consulted or informed about issues that affected their work. Some confirmation of his comment was evident on the first day of the data collection period. As the assessment co-ordinator for this school, this teacher was chosen to be observed for this research project without his knowledge and was not made aware of any details or information as to when it would begin. He did not realise the researcher was starting that day, although the Ministry of Education had informed the headteacher several weeks prior to the start of the data collection exercise.

During the data collection exercise, an attendant came in to put up the New Year's decoration, another teacher was busy rehearsing for the party while using a microphone. At one point before the recess, the headteacher arrived with the school inspector on an unannounced visit. The co-ordinator, who had been listening to his pupils discussing living things, went to be introduced to the visitor and, in turn, introduced all the other people in the room. At lunch time, he said :



*“it’s always like this. How can you work in this kind of situation ?”.*

During the second observation, the co-ordinator said he was not happy at the school but *“there was nothing I could do”*. He appeared to have a regular and similar routine in his classroom. The day always began in the same way with attendance taken on the register and a check on the understanding of the tables (2-12). The pupils had different folders or workbooks for their lessons. These included Mathematics workbooks, English workbooks, Environmental Studies workbooks and French workbooks. There was little evidence of any teacher-made materials in the classroom. The tables were always set up and pupils worked in small groups at a table on their booklets. The co-ordinator did not give any instructions for the seat work. It appeared that the pupils knew where to sit and also to start right away with their work, which involved copying a sentence from the blackboard and adding a line of their own with a picture. They then were to complete two pages of Mathematics and finish a page on the correct formation of a letter as drawn on the board. This routine was helpful to the co-ordinator because it gave him time to attend to particular pupils or to deal with problems in the class. The design of the classroom was such that anyone going to the next classrooms had to walk through this teacher’s classrooms. This was found to be very distracting to the pupils and the teacher himself, especially during teaching and assessment activities.

#### **4.4 The Assessment Co-ordinator in Action**

The assessment co-ordinator used a variety of published work schemes in separate subject areas in order to simplify his planning and ensure coverage of basic skills.

He said that these were picked because they covered the curriculum requirements. With frequent interruptions and a very large class, he found workbooks the best way to track pupils' progress and keep the work continuing at a steady pace. He could send these workbooks home for extra work if his time in class was cut short. He used these workbooks as samples of work as well. His long - term planning therefore consisted mainly in reading the curriculum for the skills and knowledge requirements, selecting the available work schemes to cover these skills and creating simple routines that pupils could repeat daily to cover other content and skills. At the beginning of the class, the pupils copied the date, a short sentence about the weather or season, wrote their own sentence about their day and drew a picture. The co-ordinator's sentence often included rhyming words or sound patterns. The co-ordinator always had the curriculum documents at his desk and referred to them all the time. He used the examples in the curriculum as ready-made activities when he was unsure about the way to teach and assess the learning competencies.

For weekly planning, the co-ordinator took the lead from the work schemes once again. In Mathematics, he would check the work coming up in the next few pages of the booklet and plan a manipulative activity to precede the pencil and paper task. The co-ordinator planned three stories to read per day. He and other teachers mentioned that the pupils do not often have stories read to them at night, although books are sent home twice a week. He selected books for their congruence with topic work.

There was little evidence that the assessment co-ordinator adapted his lesson



plans for subsequent lessons based on information gathered from questioning, observing or discussion in the class. In reading, however, the teacher kept notes on each pupil's progress and used summaries of the stages and components of reading skills photocopied at the top of each pupil's anecdotal record. His notes indicated what the pupil was able to read and the strategies used. In interview, he said that he used his anecdotal notes as a record but also as a guide to selecting the next book for the pupil. He used various Reading Series which provided a progression of reading texts. In this way, the co-ordinator used these notes to feed forward into planning and to keep track of a pupil's current skills according to standard curriculum requirements.

In Mathematics, the co-ordinator did not keep notes to help his plans. Instead, he corrected work daily and used the workbooks as samples of work. He said that his groups were generally selected on the *'ability of the pupils to work independently or not'*. He usually sat with the group that required the most monitoring. The other pupils came and queued at his desk to have their work checked. At the end of one session at recess, he was asked by the researcher who was ready for the next skill and who needed more practice. He was able to answer quickly for nine pupils but these were the pupils who needed more work. The others, he said, were all doing adequately. He relied on memory for this judgement rather than notes, but could speak more specifically when he glanced through their workbooks. From these observations, the co-ordinator exhibited many of the attitudes and practices associated with the 'critical intuitive' model of teacher assessment (McCallum et al., 1993). The co-ordinator minimally adopted the curriculum procedures and did not appear to integrate assessment into his

practice in any systematic way. He appeared an experienced practitioner because he appeared to be very confident that he was covering the curriculum and assessing the pupils' work in an ongoing way. However, there was little evidence that he planned assessment into his teaching or that he conducted particular tasks designed to reveal achievement or thinking.

During the Environmental Studies class, the co-ordinator set up experiments and stayed in the class during most of the session with each group. He made sure the others were working on activities they could manage independently at these times. The co-ordinator had a very clear plan concerning what had to be learned through the activity. He referred to a planning sheet which listed the elements of the activities, including the questions he was going to ask. He did not write down any notes from these sessions. However, he did look at the pupils' notes at the end of the lesson. He seemed very focused on the spelling of words on the pupils' work rather than the content as evidence of conceptual understanding. He did not have any pupil do the experiment again to check their thinking. He was intent on everyone getting a chance to *'have a go at it'*. He selected four pupils to work at the science table at a time. The co-ordinator stayed and asked questions of the pupils and demonstrated the task several times. Some of the questions the co-ordinator asked were drawn from the workbooks examples, he said. He asked generally the same questions each time, indicating that he did not change his teaching as a result of his reflections of the progress of previous groups or the particular needs of the group he was working with.

The assessment co-ordinator did a great deal of in-class marking of workbooks



with the pupils beside him which he said informed him as to who was getting on well and who was not. He had tables grouped by ability. Several times during the observation period, he moved the pupils from table to table. This may have been in response to his assessment of their work. He said the criterion for the different tables was the level of independence the pupil was showing. However, everyone at a table was working on very similar language or Mathematics questions at the same time.

The co-ordinator, while doing work on vocal sounds in the morning, would go through a list of sounds he had covered and ask for words starting with that sound. He asked several pupils to give him a word with that initial sound. He kept a list of sounds that no one seemed to know well. The co-ordinator modeled the sound but did not teach again the sound later in the day. He often reviewed it the next day. If the pupils knew the sounds well, he would drop them from the list. The verbal interactions were initiated by the co-ordinator. The pupils gave their responses and the co-ordinator would then give feedback. He appeared to be seeking a specific answer from the pupils in response to his questions. For vocal sounds, the question often simply required the pupils to think of examples of words starting with the identified sound, although if they were stuck, he would give them clues.

This excerpt comes from a session in vocal sounds. The pupils have come in and listened to the morning notices and a story. They have been sitting for about 10 minutes. With 33 pupils on the floor, some of them whispering and answering at the same time, it was difficult to hear everything.

Co-ordinator: Today, we are going to practice your sounds to help you in reading. This one's D. Say the sound D. Deeee. He makes the sound and the pupils repeat it.

*(The co-ordinator is positioned at the front and above the pupils on a chair. He gives a reason for studying the letter sounds and reminds them of the vocal sound programme they have been studying. He then models the sound and gives examples).*

Co-ordinator: D for? *(He looks round the group looking for examples of d words and he asks two pupils. Only a few have their hands up).*

Co-ordinator: D for dog?

Pupil: Doll

*(Co-ordinator does not indicate whether the pupil is right or wrong. However, the pupils seemed to understand that if he moved to the next pupil or question, then the answer must be correct).*

Pupil: Dirty *(the co-ordinator shakes his head).*

Co-ordinator: Right then M is for mother moon. M for...

Pupil: Mountain

Co-ordinator: *(points to himself).*

Pupil: Man

Co-ordinator: Yes S for? *(points to the sky. No one answers).*

This example shows the kind of questions often used in the class. The co-ordinator asked many closed questions, often looking for one correct answer. The pupils did not respond when they were not sure of the answers he wanted. This



might account for the few numbers of hands up when questions were asked. Here the co-ordinator used a clue to help the pupils give an answer he was looking for. The sequence is repeated and the pattern well-understood by the pupils. The co-ordinator knows the answer and is looking for answers that conform to his notion of what is correct. Furthermore, from this exchange the teacher only has information about the understanding of the few pupils who have answered. He does not have any information about what the others have understood.

The questioning technique of the co-ordinator in Mathematics was sometimes directed to keeping the pupils doing an exercise. At times questions were directed towards processes used to get the answer to the question. The following are samples of his questioning of pupils at their tables while they were working on Mathematics.

Co-ordinator: Read the question to me? What does it say?

Pupil: We need the numbers up to 20

Co-ordinator: They are written on the blackboard. *(He waits while they work).*

What's the answer? *(There is no answer from the pupils).* Did you all count?

Pupil: 15

Co-ordinator: Yes. What's the next one? Read the sum out to me. What does it say?

Pupil: *(All the pupils say together) 1+2+3= (While the pupils started to make cubes fit the question, the co-ordinator worked with a boy who was having difficulties).*

Here, he directed them to the process. The co-ordinator said he reviewed the instructions with the small group and then gave individual help when it was needed. On several occasions, the co-ordinator sat at a group table and watched the pupils work. He did not ask them questions and waited until they had finished before he corrected them. He did not make any anecdotal notes from these brief observation periods and his intention was often drawn away by noise in other parts of the room. It was not clear how he made use of this information.

In the Science lesson on plant cells, the co-ordinator did not appear to use what he had found from one group and use it to improve his presentation or discussion in the following groups. The questions he asked did not change substantially, though he sometimes changed the order and the phrasing. He did not actually read from his list but referred to it. In one group, he had everyone watch the whole experiment and then everyone had a chance to do it. He felt they could not listen and play at the same time. He was pushed for time because of the frequent assemblies and interruptions. He tried to make sure that everyone had at least the experience and had the opportunity to discuss the basic questions about the concepts themselves. While the notes were often done without him, he made sure he asked questions about the various aspects of each cell from each group. As a result, though he used a task and a set of questions that could have been used more formatively to assess each pupil's understanding, or to improve his own teaching effectiveness, he did not appear to do so. He had to monitor the rest of the class at the same time as the Science lesson. In the event, the amount of time allotted to the task was limited to about 10-15 minutes per group.



The co-ordinator used guided practice, modeling and questioning in some activities. In work on vocal sounds, for example, he would repeat the sound and give several examples of the sound in a word. The teacher made clear the process to solve problems through guided practice rather than telling the pupil the answer. When correcting spelling lists, he would add more words that followed the same rhyming pattern and point out the similarity. This also informed the co-ordinator that the pupil was noticing and understanding the pattern.

Co-ordinator: Give me some more words which end like get, jet, met, pet.....

Pupil: wet

Co-ordinator: Yes that's correct.

During the data collection period, this kind of teaching strategy re-occurred. It was determined that such examples might constitute a specific kind of feedback where the process or methods needed to solve a problem were identified. The pupil was essentially led through the process until an answer became clear. The assessment co-ordinator did not go over the process or summarise it for the pupils after the talk. This may have helped the pupils generalise the process and thus be able to transfer the thinking to other similar situations.

During the various teaching and assessment phases, this co-ordinator seemed to assess his pupils for two main purposes: providing feedback and diagnosing. Several examples will be shown to provide evidence of the two assessment purposes. The first example of feedback could be regarded as implying punishment. For example:

Co-ordinator: You are very slow in doing your work. Others are on page 12 and you are still on page 5. I'll have to inform your parents about that.

These comments were threatening in that the voice was very loud and everyone heard what the co-ordinator was saying. It was obvious to others that this pupil was being reprimanded. The pupil was also compared to another pupil (norm referenced) and the co-ordinator was threatening to call his parents (communicating information to parents).

There were times when the co-ordinator smiled a great deal, especially during story time. He made many general comments that work was "lovely". Other approving feedback included:

*"That's my girl"* and *"He's a good boy."*

He used please and thank you quite a lot, even when the pupils helped to tidy the rooms or return the boxes.

The co-ordinator was nevertheless very specific concerning appropriate behaviour and language. He shouted at times and called certain actions "naughty". For example, after hearing from another teacher that two boys had been teasing another boy at playtime, the co-ordinator was very angry with the two boys after lunch. At one point he provided disapproving feedback by referring to one boy as *"not nearly as nice as your other friends."*

In Mathematics, the co-ordinator gave repeated comments on the criteria necessary for success, generally relating to work habits. *"Slow and careful"* were



words he repeated often to pupils in response to noticing careless errors in their books.

There were many examples of correction of errors. In all subjects the pupils completed work and then lined up to have it checked.

Co-ordinator: This is not it (*A number sequence was not right*) What is wrong?

Pupil: I don't know

Co-ordinator: Look at the blackboard (*The co-ordinator pointed to the number*).

Pupil: Oh yes (*The co-ordinator took the next pupil's book. The first pupil returned to his desk and asked help from his friend*).

In this instance, the co-ordinator showed her a way of finding out the correct answer but did not explain enough to the pupil for her to complete the correction on her own.

In language activities, the co-ordinator made comments on spelling and neatness regularly. He also corrected at a desk and checked and totaled up the errors as he talked. Some samples of his comments are shown below:

Co-ordinator: Now... three wrongs. (*The co-ordinator put circles around the words which are misspelled.*)

Co-ordinator: That's not very good. Is it? Can you do it again?

For his new workbook, a pupil asked the co-ordinator how to spell 'gold'

Pupil: How do you spell 'gold', Sir?

Co-ordinator: How do you spell 'bold' (*He said it slowly and phonetically.*)

Pupil: B-O-L-D

Co-ordinator: Now spell 'gold'. What's the first letter?

Pupil: G

Co-ordinator: Now spell it.

Pupil: G-O-L-D

Co-ordinator: Very good. You should use your head. Now you can try the next one.

Here, the rhyming word pattern is made clear but the way the co-ordinator said, "*You should use your head*" made the feedback less positive than it might have been. The co-ordinator in this example made the process clear but used vague descriptions to articulate achievement.

The pupils had been adding two numbers together and had just completed a page of adding three numbers together when the co-ordinator commented.

Co-ordinator: This is a little bit harder. This is because you have three numbers to add up. Try to put the number here. (*He did a demonstration*). Make the numbers neatly.

Pupil: What about making it with blocks and then putting them together and then adding up?.

Co-ordinator: That's good if this is what you want.

Although this example indicates that the co-ordinator is describing the process and criteria, the pupil's suggestion of a possible method to make the work easier and clearer was not taken into account by the co-ordinator.

The next example shows why the work was very good.

Co-ordinator: Excellent work! You have got all the answers right this time.



So far, it has been shown that this co-ordinator did classroom assessment for the purposes of providing feedback to pupils and communicating information to parents. Did he do assessment for other reasons? Observation of his activities suggest that he also did assessment for another purpose: diagnosis. The co-ordinator was noted to be constantly on the lookout for pupils who were having problems with learning. This type of assessment appeared to be the most common in this school and also at Elizabeth and Manor schools. The co-ordinator tried to identify these problems by observing the pupils' performances and behaviour, questioning them or assigning various tasks and checking their work and then documenting their frequency in an attempt to measure whether they had learned the material and accordingly selecting remedial activities.

One of the most common and routine assessment activities which was done at the end of each teaching session at this school was the 'testing' of the previous lessons taught either on the same day or on the previous day.

In this way, the co-ordinator tried to use it as a foundation for the new knowledge. Further, a necessary precondition was to assess pupils' present level of knowledge as far as the previous taught material was concerned. The co-ordinator attempted in this way to diagnose whether his pupils had any gaps in their mastery of the previous material and skills needed; whether they were able to accept the new ones and whether they needed any additional explanations or help, to make a success of the new topic. In other words, the whole process was a check for comprehension and diagnostic assessment. The following illustration is a good

example of the co-ordinator examining his pupils in the seven times table taught in the previous lesson (in italics are the researcher's reactions).

Co-ordinator: Today we are going to revise the previous day's work, that is table seven. What is three times seven ?. *(The majority of the pupils raise their hands. The co-ordinator glances at Sanita).*

Sanita : Twenty-one, sir.

Co-ordinator: Well done Sanita! Very good.

Co-ordinator: What's six times seven?. *(Not many hands are raised. After a short wait, he turns to Gita)*

Gita: Thirty-five, sir.

Co-ordinator: Wrong. Could someone else try. *(He signals to Pierre to answer).*

Pierre: Thirty-eight.

Co-ordinator: It is forty-two, actually. O.K. what's seven times twelve? *(Three out of thirty-eight hands are raised. He nods to Raj and asks for an answer).*

Raj: Eighty-four.

Co-ordinator: Correct, good Raj. O.K. What's seven times six?

Devika: Forty-nine.

Co-ordinator: Wrong. Could someone else try. *(He signals to Pierre to answer).*

Pierre: Thirty-eight.

Co-ordinator: It is forty-two, actually. O.K. what's seven times twelve? *(Three out of thirty-eight hands are raised. He nods to Raj and asks for an answer).*

Co-ordinator: Since some of you have still not understood table seven, what we will do today is to revise together this very table so that each and everyone of you have mastered them very well. So, let's revise table seven again for the next hour



or so.

Thus the co-ordinator diagnosed his pupils' competence in the previous teaching unit of the seven-times table, before he went to table eight. Furthermore, he used the diagnostic information to decide to repeat the previous lesson instead of continuing, that is the diagnostic information was used to assess the effectiveness of his teaching.

When, for example, the co-ordinator noted very few hands raised for the seven-times table, this was a diagnostic feedback for him that something had gone wrong with his teaching. Hence, his reaction to repeat the seven-times table. His diagnosis and prediction of his pupils' learning were done by examining them in the seventh-times table and finding that the majority of them had serious difficulties and predicting that if he proceeded to the eight times table, the problems would simply aggravate and become worse. That is why he decided to repeat table seven.

Having looked at the purposes and conduct of classroom assessment, the remainder of this section examines what was assessed by the co-ordinator in the course of conducting classroom assessment. It also presents findings of any problems this co-ordinator faced during assessment and how he coped with these.

When describing what was assessed, it is interesting to start with the learning objectives pupils had to attain. It is worth mentioning that the content of assessments was officially pre-specified by the Ministry of Education and the Mauritius Examinations Syndicate. These competencies which the pupil had to

demonstrate after the end of an instructional process and which had to be observable and in principle testable, were broken for each teaching unit that pupils had to achieve and are described in detail within the curricula and the teacher's manual (Learning Competencies for All, 1992).

Examples of learning competencies:

**English (*Essential Learning Competencies*):** Use capitalization, final stop and question mark.

**Mathematics (*Essential Learning Competencies*):** Multiply a three digit number by a two digit number.

**French (*Essential Learning Competencies*):** Anticiper la suite d'une histoire/d'un film.

**Environmental Studies (*Essential Learning Competencies*):** Draw and label the main parts of a volcano.

It is obvious from the above that emphasis is placed on expressing the objectives in terms of detailed activity which is determined by the appropriate verb and the content.

What sort of objectives did the teachers assess? For assessment purposes, it was observed that the co-ordinator at this school was more concerned with the four core subjects. At no time was the co-ordinator found to be planning, teaching or assessing non - core subjects like extra curricular activities. These findings were similar to those in the other three case study schools. The interest was on the four core subjects. This may be because these four core subjects are compulsory at the Certificate in Primary Education examinations.



Example:

- Understand link between sentences/paragraph (English)
- Find equivalent fractions (Mathematics)
- Raconter une histoire en donnant son opinion (French)
- List five sources of water (Environmental Sciences)

The Learning Competencies for All document (1992) contains Essential Learning Competencies and Desirable Learning Competencies. Sixty per cent of the competencies are ELCs while the remaining forty per cent are DLCs.

The content of the learning competencies the co-ordinator was assessing at this school could be generally classified as lower level objectives of Bloom's (1956) taxonomy. That is, the teachers were more concerned with knowledge and comprehension as the following examples show:

- Produce vocal sounds in English (Recall).
- Measure length in metres and centimetres (Understanding).
- Consulter une table des matieres (Recall).
- Name the three physical states of water (Recall).

Similar findings were noted at case study schools: Elizabeth and Manor. This is surprising when case study, St George school is a high performing school. One explanation could be that the majority of the pupils passed the CPE examinations without being ranked.

There may be several hypothetical reasons for assessing lower level objectives. The first reason may be because these objectives were easy to assess. The second reason could be that the co-ordinator was aware of the strengths and weaknesses of his pupils and thirdly, because the co-ordinator believed that pupils should master the basics (Rowntree, 1977; Satterly, 1989; Airasian, 1994).

Not only was this co-ordinator assessing lower level objectives but was observed to be looking at the actual process his pupils were following up to the point where they had gone wrong. Then he would praise the pupil for getting it right up to that point and then he would explain why they had gone wrong and finally help the pupils to arrive at the correct answer together.

Because of shortage of time, it was observed that the co-ordinator worked out the answers with the pupil(s) concerned during the break or after school hours. If the majority of the pupils were unable to complete the exercise, then the co-ordinator would analyse the problem and explain it to all the pupils.

This co-ordinator also assessed socio-affective behaviours. The term 'socio-affective behaviours' is used in this thesis to indicate processes that observed teachers were applying for gathering information and evaluating pupils which are not directly associated with pupils' academic progress. This co-ordinator was found to be often unaware that he constantly collected socio-affective information from the pupils, when deciding about them during the daily teaching routine. This co-ordinator's instant responses when he was asked by the researcher 'which



*pupils' traits do you assess?'*, referred mainly to cognitive traits, especially those which the curriculum declared that primary schools should help pupils to develop. However, when the co-ordinator was further asked to think about which other qualities he might take into account when assessing, he responded to the effect that he bore seriously in mind other information of a non-cognitive nature (Airasian, 1996) when he made decisions about his pupils, such as attentiveness and other general behaviours at school, as the following two comments indicate:

*"I am very pleased with the behaviour of Satiam. He is well mannered."*

*"Jeewan is too talkative in class. At times he is rude to his friends. Should be spoken to."*

As far as control of speaking in the classroom was concerned, it was found that typically, the co-ordinator had to give permission to the pupils to speak or the pupils had to raise their hands to let the co-ordinator know they wanted to say something. Correcting, controlling and monitoring pupils' talk was considered by the co-ordinator as an essential part of his teaching goals. These are typical examples of the co-ordinator's interactions with the pupils which were to control the pupils' speech:

*"Speak one at a time"*

*"Tranquilité, s'il vous plait" "Quiet Please"*

*"Don't put your hand in front of your mouth when you speak"*

This co-ordinator's attention also focussed on characteristics associated with the skills pupils were expected to develop during their schooling time. For instance,

he was observed teaching the pupils to manipulate essential schooling tools such as using a ruler to draw a straight line, forming the letters properly, holding a pencil properly and using a pair of scissors.

## **4.5 Overview**

In the first section of the conclusions, an outline of the findings in this case study is given in response to the research questions on classroom assessment. In the second section, the findings from the observation of the co-ordinator are presented.

### **4.5.1 Responses of the Assessment Co-ordinator**

For the first research question, “why do you do classroom assessment?”, the assessment co-ordinator said he did it for four main reasons: to provide feedback to the pupils, to diagnose pupils’ difficulties, to evaluate the lessons and to communicate information to the parents.

How did he conduct classroom assessment? He said he did it by observing closely pupils working and also by questioning the pupils during instruction to check if they had understood the lessons.

The third research question put to him was the content of classroom assessment.

What did he assess? He said he assessed process, product and mastery of basics.

When the assessment co-ordinator was conducting classroom assessment, did he



face any problems and if so, what measures did he take to resolve them? He faced two problems: difficulty in assessing several pupils simultaneously and lack of time to assess all the pupils. To resolve the two problems, he gave them homework and also did the marking with the pupils when there was available time.

The co-ordinator was also asked about the use and influence of the Learning Competencies document. He said that his teaching methods had been influenced by the use of the document and that he used it for planning his daily lessons and for deciding on a pupil's achievement.

The next section looks at the findings from observing the assessment co-ordinator. Did he do what he said he was doing?

#### **4.5.2 Findings from Observing the Assessment Co-ordinator**

There was some evidence of his use of the curriculum for long - term planning. Weekly plans were sometimes completed at the end of teaching rather than at the beginning. Weekly plans had to be submitted to the head. These were returned with comments to the teacher, but a copy was kept in the office of the head teacher. Assessment sections of the plans were most of the times left blank or with general comments such as 'satisfactory work in most areas'. There was no indication as to the tools or methods used to assess the teaching.

There was little evidence that the co-ordinator planned adaptive strategies based on teaching and assessing. No clear evidence of this was observed other than

making sure that pupils had more time if they had not finished and providing more explanation was warranted. Similarly, the observations of his teaching and an examination of his planning documents gave little indication that information on pupil learning was used to plan subsequent lessons.

This assessment co-ordinator did not use questioning strategies that might elicit more information about the process used by pupils and their thinking. However, he did work through examples using talk to explain processes for completing work very often in Mathematics and English. Questioning seemed to be the weakest area of the practice because the co-ordinator appeared to evaluate and judge what the pupils said in some way. The pupils did not offer elaborate descriptions of their work unless the co-ordinator was working with them on a one to one basis.

The co-ordinator used modeling and guided practice in his lessons. Evidence for this practice was seen in English and Mathematics on a one to one basis. The co-ordinator did not in turn observe the results of his guided practice very often and therefore missed information on whether the guided practice had worked or not. For example, he modeled letter formation but did not watch the pupils write the letters. No real use of exemplars was observed other than to show pupil work at the end of the lesson. Showing an exemplar is not sufficient to communicate the criteria. Teacher questioning about how the work was accomplished, why it was done in a certain way and how it might improve would develop the function of the use of exemplars.



The literature has identified many types of feedback. An important function of feedback for learning involves providing information for improvement and achievement and articulating and constructing the way forward. Little of this type of feedback was observed in this co-ordinator's practice. The feedback given by this co-ordinator was largely corrective and evaluative, with more negative feedback than was seen in other case studies.

Assessment often makes use of portfolios and samples. Although they were not compulsory at this stage, they can be included in primary classes. The co-ordinator used workbooks as samples of pupil achievement and as clues to the processes used to complete the work.

No evidence was observed of the use of standardised assessments integrated into topics and teaching. Formal and informal observation was used in English and Mathematics but the co-ordinator was not clear as to why he was doing this up. There were no anecdotal notes completed other than in reading. This format for making notes was designed and instigated by the headteacher. The co-ordinator liked the format but had not adapted it in any way to another topic or subject.

This co-ordinator did classroom assessment for diagnostic purposes. He was constantly on the lookout for pupils who were having problems with learning. One of the most common and routine assessment activities was the testing of the previous lessons taught.

At this school, the co-ordinator was concerned with the four core subjects:

English, Environmental Sciences, French and Mathematics. He was observed to be assessing the lower level objectives of Bloom's (1956) taxonomy. There may be several hypothetical reasons for teaching and assessing lower level objectives: easy to assess, stress on the basics or awareness of the strengths and weaknesses of the pupils by the co-ordinator.

The co-ordinator looked at the actual process his pupils were following and praised them for their efforts. Not only did he assess socio-affective behaviours but also characteristics associated with skills his pupils were expected to develop during their schooling time.

Shortage of time was observed to be the only problem he encountered in the conduct of classroom assessment. It was noted that he continued to assess during the break or after school hours. If, however, the majority of the pupils were not able to complete their exercise, he analysed the problem and explained it to all the pupils.

The school context, as described in the teacher's interview, suggests that the teacher assessment was not well-developed in this school despite the fact that assessment had been the focus of the school development plan. Information from the teachers indicates that the school was undergoing several school improvement initiatives simultaneously. The teachers' views suggest that they felt pressure from both the new curriculum and from the changes in the school instituted by the head teacher. The effects of the external and internal pressures are reflected in the teachers' generally low morale at the school. The teachers felt they were being



evaluated and appraised by the head at the same time as they were coping with changes in curriculum and assessment requirements. It is worth stressing that no other schools in this research felt unsupported by their head. This distance and lack of communication between the staff and the head teacher was not observed in the other schools. This finding indicates a key difference from the other case study schools whose head teachers saw their roles as a buffer against the sheer magnitude of change required by the curriculum. Though assessment was a focus for school staff development in this school, the teachers were not impressed with the in-service training they received. One teacher accompanied the head to the in-service training sessions instead of two teachers. If two teachers had attended the sessions, they might have provided a mentoring relationship for each other as they developed new skills.

The co-ordinator did not seem to demonstrate effective use of many strategies. At first, this made the analysis problematic. The ways in which strategies might be linked or integrated through the three phases of teacher work was not advanced in any substantial way from this case study.

Questioning which results in more pupil-led dialogue with the teacher and other pupils seemed increasingly relevant. Observing pupils at work and the effective use of performance tasks are skills which required training. This assessment co-ordinator carried out some observation but did not use the information in any specific way. The teacher used his position of power to control the class. He seemed to have difficulty with discourse and instructional techniques that required a more collegial approach. This became evident when the co-ordinator attempted

to use a scientific activity. It seemed difficult for him to change or share power with the pupils in an investigative task even when he wanted to. He could not change the pupils' conception of power for this type of learning task. It appeared that this co-ordinator used the strong framing as a coping strategy given the context of the school, the head teacher and his perception of the behavioural needs of the pupils.

The role of guided practice, containing feedback which explains and develops the processes needed for completing tasks, seemed important. This seemed the prevalent form of classroom assessment practised by this co-ordinator and it was integrated with his teaching practice.



## **Chapter Five: Case Study – Elizabeth School**

### **5.1 Introduction**

Elizabeth school is a low performing school located in an urban area. The one storey building has several classrooms, a swimming pool, library and a physical education hall. There were 532 pupils on the school roll and these pupils were mostly of European backgrounds. There were 20 pupils in each class. Most of them were bilingual, French being their main speaking Language.

The assessment co-ordinator said that at this school there was a lot of stress on all - round development and less emphasis on academic achievement. The staff of the school included a Director of Studies, one deputy Director, a secretary and thirty teachers who were all employed on a full-time basis. The school was funded by a trust.

Information concerning school context was collected through interviews with the teachers, as well as through the analysis of school documents. Before becoming Director of Studies at this school, the headteacher had been deputy head of another school and a class teacher for ten years. To the Director and the staff of this school, the Learning Competencies document gave an indication of a complete take-over by the government. The size and amount of the Learning Competencies' content was off-putting for the teachers. The teachers tried to read it and condense it so that it could be comprehensible. They tried to put it on one sheet of paper to make it more and easily manageable. The Director found the Learning Competencies' design with outcomes very rigid and worrying. However, when the teachers spent more time with the document, they found that a

range of expectations was included. In general, he felt his teachers had a difficult time holding everything in their mind and it did not really fit in with the method of topic work or integrated study so familiar to the teachers at this school. After working with the document, the teachers began to find the content more realistic and found their own way of using it. They thought that the science material was problematic. According to the Director, many felt that depth had been sacrificed to breadth. In general, the Director interpreted his role as a filter for his teachers to protect them from too much change too fast. The overall feeling about the implementation was that resources were being wasted and still 'one had the feeling of coming away untrained'. More time was needed for training, support and implementation because everyone learnt it on the run.

The school had an informal assessment arrangement. Assessment was termed "Continuous Assessment" and this included questioning, observation, recording and discussion with other members of staff. It was the policy of the school to meet twice a year *"to co-ordinate the pupils' grading and also to ensure that these are being interpreted in a consistent way"*. The policy of the school was to have samples of pupils work in a *"Records of Achievement"* book which was given to the pupils to take home at the end of the year but returned and passed on to the next teachers so that they had information of the pupils' current level of work.

There were nine teachers in standards IV, V and VI at this school. Each standard had three teachers. One teacher from the nine teachers acted as the assessment co-ordinator. At interview, the teachers were asked a series of questions on why



they were doing assessment, on their assessment practices, what they were assessing and whether they faced any problems during this exercise and if so, how did they resolve them. There were further questions on the use of the Learning Competencies document for planning daily lessons, deciding on pupils' achievements, diagnosing pupils' strengths and weaknesses and whether their teaching methods have been influenced by the use of the Learning Competencies document.

Overall results are summarised in tables of frequencies. Percentage tables exceed one hundred in tables since multiple responses were possible.

After the interview, the assessment co-ordinator was observed. This was done to explain what the teacher believed to be her classroom assessment practices and the influences that have shaped her thinking and work. The observational data was used to confirm or question her self-report.

Teachers were asked why they assess their pupils and the roles of assessment in aiding teaching and learning.

## **5.2 Results from the Interviews**

The literature review showed that assessment in the classroom is an integral part of the teaching and learning process. Teachers constantly assess every aspect of pupils' performance for various reasons (Broadfoot, 1979; Shipman, 1983; Stiggins, 1985; Satterly, 1989; Rowntree, 1991; Airasian, 1994; Pollard et al., 1994).

Data were collected by observing the assessment co-ordinator as part of the study to supplement the semi-structured interviews data and also to provide first - hand evidence of the classroom assessment practices. Such evidence was not available from the interviews. These observational data might verify or dispute what teachers assert they do when they were interviewed. In other words, these data will indicate whether what they said they did was what they actually did during the assessment phases.

Since classroom interactions and assessment activities are too complex phenomena, chapter 5 attempts to present those observed in a rather summarised and organised manner. There will be several excerpts (short/long) from the observations to indicate why teachers were assessing, how they conducted assessment and what they assessed.

It is hoped that this kind of presentation will enable the reader to have a clear understanding of the practices involved in these situations. But before presenting the observational data, results of the semi-structured data are presented in Tables 15 to 19 to get the views of all the teachers of Elizabeth school.

To discover teachers' views regarding why they assess and their opinions on assessment's role in assisting teaching and learning, they were asked about the purposes of classroom assessment.



**Table 15: Purposes of Classroom Assessment**

Purposes of classroom assessment	Responses (N=9)			All Teachers (%**)
	Std IV	Std V	Std VI	
To provide feedback to the pupil	1*	1	3	5 (55.6)
To diagnose pupils' difficulties	0	0	0	0 (00.0)
To evaluate the lessons	1*	0	1	2 (22.2)
To monitor the progress of pupils	1*	1	3	5 (55.6)
To stress the main concepts	1	0	0	1 (11.1)
To communicate information to the parents	0	0	0	0 (00.0)
To provide feedback to the teacher	1	1	3	5 (55.6)
To motivate the pupils	1	2	3	6 (66.7)
To provide remediation	1	0	2	3 (33.3)

\*includes the response of the assessment co-ordinator

\*\*Total percentages exceed one hundred since teachers could provide more than one answer

The responses of the teachers are given in Table 15. At this school, monitoring of pupils' progress, providing feedback to the pupils and to themselves and motivating the pupils were the four main purposes of classroom assessment. Five (all the three standard VI teachers, one teacher from standard IV and one teacher from standard V) teachers mentioned feedback while five out of nine said they did assessment to monitor progress. Like case study, Manor school, the teachers did not mention communicating to the parents as the purpose of classroom assessment.

Two out of nine teachers said evaluation of the lessons. This was a standard VI teacher.

There were three main reasons for the assessment co-ordinator to assess her pupils: to provide feedback to the pupils, to evaluate the lessons and to monitor the progress of the pupils.

These are some of the comments made by teachers for doing classroom assessment.

*“I try to identify shortcomings and gaps in the pupils’ mastery of skills or content”.*

*“I diagnose the strength and weaknesses of pupils for remediation purposes”.*

*“Through this assessment, slow learners are provided with an opportunity to catch up with others.”*

*“It enables me to make a comparison with the pupil himself at some other time. Hence, assessment makes the teacher aware of certain difficulties a pupil is encountering.”*

*“The pupils constantly want to see my reactions to what they say, to what they produce and also their behaviour and attitudes in the class. Especially when they have completed an exercise given to them they are very keen to know the outcomes.”*

*“I like to ascertain whether the pupils have understood or mastered the concepts or ideas.”*



**Table 16: Conduct of Classroom Assessment**

Classroom assessment practices	Responses (N=9)			All Teachers (%**)
	Std IV	Std V	Std VI	
Close observation of a pupil working	0	0	1	1 (11.1)
Questioning at the end of a lesson to evaluate the instruction	1*	3	3	7 (77.8)
Questioning during instruction to check if pupils have understood	2*	3	3	8 (88.9)
Homework	0	0	3	3 (33.3)
Workbooks	0	0	3	3 (33.3)
Comments	1	1	3	5 (55.6)
Tests	2	2	3	7 (77.8)
Correction of work	3*	3	2	8 (88.9)

\* includes the response of the assessment co-ordinator

\*\*Total percentages exceed one hundred since teachers could provide more than one answer

In an attempt to find out how the teachers conduct classroom assessment, they were asked what sort of assessment practices they applied. Also, whether they gave homework and teacher - made tests.

An open-ended type of question was put to the teachers to give them an opportunity to describe as many assessment practices as they applied in the classroom setting. Table 16 gives the teachers' responses to the second question. The results of the table suggest that teachers said they apply a wide variety of assessment - related practices.

Teachers at this school were asked how they conducted classroom assessment. Eight of the nine teachers said questioning during instruction to check if pupils

have understood and correction of work. Seven out the nine said questioning at the end of a lesson to evaluate the instruction and tests. All the standard VI teachers said they made use of workbooks and gave homework.

As for the assessment co-ordinator, she said she conducted classroom assessment using three methods: questioning during instruction to check if pupils have understood the lessons, questioning at the end of a lesson to evaluate the instruction and correcting pupils' work.

**Table 17: What was Assessed**

What was assessed	Responses (N=9)			All Teachers (%**)
	Std IV	Std V	Std VI	
Process	3*	3	3	9 (100.0)
Product	3*	3	3	9 (100.0)
Mastery of the Basics	2*	2	3	7 (77.8)
Affective Domain	2*	2	3	7 (77.8)
Social Domain	2*	2	3	7 (77.8)
All round development	3*	3	2	9 (100.0)

\* includes the response of the assessment co-ordinator

\*\*Total percentages exceed one hundred since teachers could provide more than one answer

An attempt was made to get an insight into what teachers look for when they assess their pupils. All the nine teachers in this school said they assessed process, product and all - round development. Mastery of basics, affective and social domains were assessed by seven teachers.

The assessment co-ordinator said she assessed mastery of basics, affective and



ocial domains, process, product and all - round development.

**Table 18: Problems Faced by Teachers during Assessment**

Problems faced by teachers during assessment	Responses (N=9)			All Teachers (%)
	Teachers Std IV	Std V	Std VI	
Lack of time to assess all the pupils	3*	3	3	9 (100.0)
Lack of formal training	1	0	0	1 (11.1)
Difficulty in assessing several pupils simultaneously	2*	3	3	8 (88.9)
Disruptions	0	0	2	2 (22.2)
Noises	0	0	2	2 (22.2)
Personal reasons	1	1	2	4 (44.4)
Ministry	1	2	3	6 (66.7)

\* includes the response of the assessment co-ordinator

\*\* Total percentages exceed one hundred since teachers could provide more than one answer.

Teachers were asked to indicate the problems they faced in implementing classroom assessment to find out any rationales on which they based assessment - related views. All the nine teachers said lack of time to assess the pupils, while eight of them mentioned difficulty in conducting assessment with several pupils. Disruptions and noises were mentioned by two out of the nine teachers. Six teachers said they faced problems from the Ministry, while four of them said they faced problems in implementing classroom assessment due to personal reasons.

At this school, if teachers did not have enough time to assess their pupils, they said they assessed their pupils on the next day prior to the start of the lesson. Sometimes they shortened the length of the lessons. They also made sure that

pupils were given homework on the topics covered.

The assessment co-ordinator at this school was faced with two problems: lack of time and difficulty in assessing several pupils simultaneously. How did she deal with these problems? She said she planned a series of tests on topics to assess her pupils.

**Table 19: Use and Influence of Learning Competencies Document**

Use and Influence of Learning Competencies Document (N=9)	English	EVS	French	Mathematics
	Teacher	Teacher	Teacher	Teacher
To plan my daily lessons	7*	8*	8*	8*
To decide on a child's achievement	6	5	6	5
To help diagnose a child's strengths and weaknesses	6	8	9	9
My teaching methods have been influenced by the use of the document	9*	9*	9*	9*

\*includes the response of the assessment co-ordinator

The teachers of Elizabeth school were also asked about their use and influence of the Learning Competencies document in their everyday assessment activities in the four core subjects.

All the teachers interviewed said that their teaching methods had been influenced by the use of the Learning Competencies document.

For the English subject, seven out of nine teachers said they used the document to



plan their daily lessons while six out of them said they used it to decide on a pupil's achievement or diagnose a pupil's strengths and weaknesses.

For the Environmental subject, eight out of the nine teachers said they used the document for planning their daily lessons or to diagnose their pupils' strengths and weaknesses.

For the subjects French and Mathematics, all the teachers used the document for diagnosing their pupils' strengths and weaknesses, while eight of the nine used it to plan their daily lessons.

The assessment co-ordinator said that she used the Learning Competencies document to plan her daily lessons and that her teaching methods had been influenced by its use.

This section presented findings from the teachers' (including the assessment co-ordinator) semi-structured interviews. However, these findings have to be treated with caution, since they express what teachers said, not necessarily what they actually did in their classroom. In order to cross-check the consistency of their words and deeds, the next section presents findings from actual observation in the classroom.

The next section presents findings based on the researcher's field notes gathered during the three terms of field work from direct observations. It will be interesting to see which classroom assessment practices the observed co-ordinator

fulfilled when she was doing assessment.

### **5.3 Assessment Co-ordinator: Background**

The assessment co-ordinator came to teaching after completing a Science degree in India. She was around thirty years old and lived in the North. The teacher asked the pupils to call her by her first name. The teacher's background made her especially interested in the processes and concepts around Science. The classroom was arranged to allow quiet seatwork and also group work. The classroom was organised in such a way so that centre work was at one end and the quiet seatwork at tables was at the end of the room.

### **5.4 The Assessment Co-ordinator in Action**

To this assessment co-ordinator, topics planning were the most important level of decision making because it incorporated all subject areas and skills. During the interview, the co-ordinator said she decided on the topic with the other teachers after a careful read through of the learning competencies to see which competencies she could cover with a task or topic. She felt the Learning Competencies document helped her with this.

For this co-ordinator, specific statements of attainment were more useful than programmes of study. She said she did not normally list the learning competencies on the planning sheets. However, she said she sometimes included more advanced concepts in her plans than the curriculum required. For example, during the water theme, pupils made pumps, created floods and erosion experiments as well as studies of insulation, cooling and heating concepts. They



were preparing a dramatic presentation about the water cycle for an assembly. School assemblies over the term, and especially at the end of the term, involved classes presenting projects, plays or music on the water theme. The term's plan was handed in to the office. These plans were checked to see that key skills in the curriculum were addressed and that work was co-ordinated. In her weekly planning sheet, large blocks of time were given to topic project work.

The co-ordinator had an extensive weekly plan, which included details of diagrams to be drawn on the board, lists of examples and lists of games which were described with the skills they required. A check-off sheet for the topic work was kept with her weekly plans. Mathematics time was not noted on the weekly planning sheets. Mathematics explorations were planned in relation to topic work. Concepts explored included Venn diagrams for float and sink experiments, water clocks, measuring and weighing liquids and solids and hexagon shapes in snowflakes. Adding and subtracting practice was done with the Mathematics workbooks. Some pupils used counters and other manipulatives for this work and others did not. The pupils were all at different levels in their Mathematics workbooks indicating that the pupils were allowed to progress at their own pace. The work booklets were corrected by the co-ordinator during the lesson. She moved constantly about the room monitoring and correcting the booklets. Short feedback exchanges occurred at these periods.

The language programme was allotted the most time in the school day. Reading was the most important skill to be attained according to the co-ordinator, and thus figured prevalently in her planning. Handwriting and plans for work on vocal

sounds were written out in full. Examples for vocal sounds' rules such as the silent e, were listed so that she had enough examples for the whole class to try. This co-ordinator used whole class lessons frequently, and often used planned detailed notes from which to speak in front of the class.

In Science lessons, any diagram or model to be used was drawn out in her planning notes. The Nuffield Science and Mathematics material were good 'ideas' for the co-ordinator. She also used the Ministry Library Service for additional help and resources with topic planning. She mentioned that the Science curriculum was a particular help in her Science planning although, as a Science graduate, she felt confident about her skills in this area.

The co-ordinator kept some checklists noting whether or not a pupil had experienced an activity but she did not make notes on whether or not the pupil understood it. The co-ordinator did not have any formal way of monitoring achievement or tracking it for use in future planning. However, she reported that she planned by the week but it was always subject to change if she saw that they have not understood. She used group collaboration at the work centres; an instructional approach which requires long periods of investigation time. In terms of adapting her planning, this co-ordinator made comments such as, "*They need to do that again tomorrow*" and "*this needs much more time to get this right*".

The co-ordinator was responsive to difficulties as they arose in the class and it was observed that she re-visited a concept or extended a lesson if she saw that it was warranted. For example, she said she worked in vocal sounds with



handwriting because many pupils did not know the sounds of letters. A few did not know all the letters of the alphabet by sight. This may be an example of the co-ordinator reflecting on the needs of the class and adapting the lesson to accommodate those needs. She used the same method of whole class discussion at the end of a work session as observed in case study, St Anne school. The format was used to review the basic information and allow the pupils to explain their processes and learning to her and to the class. The co-ordinator did not add or change the materials at the centres from these dialogues. She did however, adapt her instructions and her explanations as a result of the pupils' explanations. After a Science lesson at the water table session, the co-ordinator was asked when and how she would discuss the principles behind their work. She said she would do so after some of the class had experienced it. That way, she could go over their understanding so far, repeat what happened and get them to explain it to others. Then, she hoped, the others could try it. She said this was not in the curriculum but the idea of density was important. So she was doing it. She went on *"I don't call it that – I call it making it thinner, containing more air or pushing more water away. I only note a list of names in my book after they have done it if they are exceptionally good or bad and then I make a note of it to check on later. I don't have time to make notes on each pupil while they work. Too many others asked me for information"*.

In the following section, examples of observational data are given to illustrate the co-ordinator's use of strategies in her teaching practice.

During one of the writing sessions, the co-ordinator modeled the kind of process

required by writing and made use of questioning and examples. She asked her pupils to tell her something they had done last week while she was away. One pupil said they had played football. The co-ordinator said “*Right, I want lots of detail as to what happened, and where and whether you like it or not*”. She said this twice to the pupils but did not write the instructions on the board. The pupil gave her details that could be incorporated into the piece of writing. She then asked other pupils to tell what happened, when and whether they all liked it or not. In this way, she used pupils’ examples, but guided them through the process of the task.

In handwriting, the co-ordinator used whole class teaching frequently and modeled the correct method or process to be learned. In this example, she talked as she modeled correct letter formation.

Co-ordinator: Today, we are going to do the letter q. This is the first time that we are going to use our alphabet chart. Let’s say the letters together. (*Pupils say the letters at the same time.*) Q is a letter that always comes with another letter. Can you guess which letter it is? (*There are no volunteers.*)

*Here, the teacher initiates discussion by using ‘we’ to indicate that she is also involved in the process. Reviews letters with chart as an exemplar and also for practice. The co-ordinator talks while she models correct formation.*

Co-ordinator: It is always with u (*She draws the q and the u on the board very slowly on a number of occasions.*)

Co-ordinator: Who knows what sound they make together?

Pupil: q (*says the letter name not the sound.*)



Co-ordinator: No. Think of the sound they make together in the picture (*She refers to the alphabet chart with the letters and pictures. (There is a picture of the queen.)*)

*Here the co-ordinator is using a logical process in that the pupils are to apply the sound to find other examples.)*

Pupil: Several say quee.

Co-ordinator: No no no, it's qu like the queen. Can you think of another?

*(Closed task – it's either a right or wrong answer and the pupils understand this.)*

Pupil: *(One hand is up)* quiz?

Co-ordinator: Good. Who has taken part in a quiz? Quiet – you hear this everyday from the teachers. *(Laughter) (co-ordinator uses praise as a motivator. She also uses jokes with the pupils.)*

Pupil: Quick.

Co-ordinator: Yes, please be quick. You are very good at these.

At this point the co-ordinator returned to modelling the formation of qu. The pupils drew these letters on the page. The co-ordinator went up and down the rows correcting individuals. She reviewed the sounds with two pupils again and after that she questioned them.

During two sessions on writing their journals, the co-ordinator walked around the tables, checking each pupil's progress. Pupils were given specific feedback (Specifying attainment) and acknowledgement of their assessments. Through these comments, the criteria for success became evident. Almost all the comments praised picture drawing with detail, trying longer words, neatness and spelling accuracy.

Co-ordinator: A bit small and messy.

Co-ordinator: What was it you were to put at the top of the page?

Pupil: My name?

Co-ordinator: Right. Have you got that?

Pupil: No.

Co-ordinator: Put it on them.

The co-ordinator was keen that the pupils depended on each other for ideas and strategies during group work sessions. She would direct pupils to ask and discuss the work with their partners, when they came to her for help. She would also expect them to make notes of words or ideas so that they could get the answers themselves the next time the information was needed.

Pupil: Do we do it first, Miss?

Co-ordinator: Ask your partner. Go on.

Co-ordinator: How do you spell food? (*she underlines it in the pupil's notebook*).

Pupil: Eh f-o-o-d

Co-ordinator: Very good. Now write it in your notebook.

Relating to behaviour, the co-ordinator also had a method of correcting pupils without making them feel as though they were being corrected. She would repeat the criteria, rules or instructions to pupils without a negative tone. Instead, she would begin by saying, "It's nobody's fault." One example of this occurred when two pupils were arguing over who was going to use a chair at a particular table during one session of group work. The co-ordinator said, "*You are not to be*



*blamed but remember, there are no reserved chairs.*” This was accepted by the pupils and no one felt badly.

When working on writing, the co-ordinator would walk around and make individual corrections and provide feedback (Specifying improvement).

Co-ordinator: This is good. Try this part again.

Co-ordinator: This is joined up writing. It’s not printing. The first one is done well. Now continue. Well done.

Co-ordinator: Do you think it will be better to use two colours?

Co-ordinator: Right. Now, at the end of this class if anyone asks how to spell ‘queen’, how many would know?

Pupils: *(They have a good laugh).*

Co-ordinator: Each and everyone. Watch and remember *(the co-ordinator modeled and talked through the writing of this word)*. She wrote it twice. *(A girl says spaces)*. Don’t forget your spaces. Sanita has already reminded me. Thank you and well done, Sanita.

Here the co-ordinator gave specific feedback on how to write the word and reminded them about spaces between the words that will improve their work. At the same time, she used a pupil’s suggestion and praised her. There was evidence of some type of collaboration, even though the co-ordinator was always in front of the class and in a position of leadership. The co-ordinator said, “Watch and remember” repeatedly during the data collection period. This had the effect of focusing their attention on her.

Theory on classroom assessment indicated that the use of feedback is needed by learners to close the gap between current achievement and improvement. The co-ordinator's practice provided evidence of this kind of discussion in the subject areas. She specifically gave instructions about what the problems might be and the processes needed to improve their work.

In one of the Mathematics classes, the pupils were placed in different groups for different Mathematical activities. For work with manipulatives, the groups were of mixed ability. For workbook exercises, the groups were arranged by work habits. One group, the co-ordinator described as "*all having attention problems*". To this group, she said when introduced (within their hearing) "*They are all working very well but needed some help to finish*". The pupils referred to were given extra time to finish their work and the co-ordinator spent a lot of time with them. She also corrected their work as they finished. This had the effect of assisting the group with completion of the task. In this way, they were able to improve. With the other pupils, the co-ordinator corrected them at their desks after they had finished everything and were working on another activity.

The feedback the co-ordinator provided for several pupils in handwriting was to directly model the process of correct letter formation by holding a pupil's hand and writing several examples of the letter. The co-ordinator corrected errors and gave information as to how to improve the work. This was done individually while pupils were working at their desks or in groups. In writing, the co-ordinator discussed achievement but also indicated ways for the pupils to check their own work.



Co-ordinator: Excellent description of what you are doing! Let's check the spelling. Oh here (*She points to a word*) Let's write it out and see if it looks right! (*The pupil looks at the word and copies it out again.*)... Yes, that's right.

The co-ordinator made no use of tests but kept samples of work in portfolios or work files. She said, "*When you stand back and look at where they were and where they are now, you can see the progress.*" She said, "*I have always done it (collecting samples) but I do them more now.*"

The co-ordinator made very little use of anecdotal notes. She made notes only on whether pupils had experienced an activity or whether they had finished it. In reading, she had the pupils write in the dates and the titles of the books they had read. She did not write any comments about their reading but only a checklist on how often she had read with them. After lunch, each pupil picked up a book and went to his/her own space to read. The co-ordinator read with about seven pupils. She explained that she listened to each pupil about twice a week. She said she just remembered how each pupil was doing. During individual reading times, the co-ordinator explained vocal sounds patterns required by new words and discussed picture context.

Another practice which was observed at this school was that tasks were often written by the co-ordinator on the blackboard which the pupils copied in their copybooks. The testing commonly used multiple choice, filling blanks and true-false techniques. The co-ordinator was found to regularly prepare her own tasks, graded in difficulty for different ability groups. She indicated that she relied on

her own tests, rather than those imposed from the Ministry to assess the pupils (Dor-Bremme, 1983). According to her, *“I use my own tests because it caters the needs of my pupils. I know my pupils.”*

So far, it has been shown that this co-ordinator did classroom assessment for the purposes of providing feedback and adapting instruction based on teaching and assessment information. But this co-ordinator also assessed her pupils for diagnostic purposes.

In this school, the co-ordinator was found typically to gather diagnostic information of a ‘physical’ nature and tried to make appropriate decisions as, for example, when she moved a boy who was sitting at the back row to a front seat when she noted that the pupil was very short-sighted and could not see the blackboard clearly. This, in turn, led the co-ordinator to refer the pupil’s problem to his parents and then to an ophthalmologist who prescribed a pair of appropriate glasses which allowed the pupil to see the blackboard even from far. As a result of the co-ordinator’s move, the pupil’s writing skills improved. So did his other achievements.

Having looked at the purposes and conduct of classroom assessment, the remaining part of this section examines what was assessed by the co-ordinator in the course of conducting classroom assessment. It also presents findings of any problems this co-ordinator faced during assessment and how she coped with these. When describing what was assessed, it is interesting to start with the learning objectives pupils had to attain. It is worth mentioning that the content of



assessments was officially pre-specified by the Ministry of Education and the Mauritius Examinations Syndicate. These competencies which the pupil had to demonstrate after the end of an instructional process and which had to be observable and in principle testable, were broken for each teaching unit that pupils had to achieve and are described in detail within the curricula and the teacher's manual (Learning Competencies for All, 1992).

Examples of learning competencies:

**English (*Essential Learning Competencies*):** Make appropriate use of a dictionary.

**Mathematics (*Essential Learning Competencies*):** Interpret a bar chart.

**French (*Essential Learning Competencies*):** Trouver le contraire d'un mot.

**Environmental Studies (*Essential Learning Competencies*):** Interpret isotherm/isohyet/isobar maps.

It is obvious from the above that emphasis is placed on expressing the objectives in terms of detailed activity which is determined by the appropriate verb and the content.

What sort of objectives did the teachers assess? For assessment purposes, it was observed that the co-ordinator at this school was more concerned with the four core subjects. At no time was the co-ordinator found to be planning, teaching or assessing non - core subjects like extra curricular activities. These findings were similar to those in the other three case study schools. The interest was on the four core subjects. This may be because these four core subjects are compulsory at the Certificate in Primary Education examinations.

Example:

- Understand link between sentences/paragraph (English)
- State the number of hours in a day (Mathematics)
- Jouer avec les mots en les faisant rimer (French)
- Name the main rivers of Mauritius (Environmental Sciences)

The Learning Competencies for All document (1992) contains Essential Learning Competencies and Desirable Learning Competencies. Sixty per cent of the competencies are ELCs while the remaining forty per cent are DLCs. The content of the learning competencies the co-ordinator was assessing at this school could be generally classified as lower level objectives of Bloom's (1956) taxonomy. That is, the teachers were more concerned with knowledge and comprehension as the following examples show:

- Use polite expressions (Recall).
- Find the perimeter of a triangle (Understanding).
- Pontuer une phrase en utilisant le point (Recall).
- Mention three effects of water pollution (Recall).

Similar findings were noted at case study schools: St George and St Anne. There may be several hypothetical reasons for assessing lower level objectives. The first reason may be because these objectives were easy to assess. The second reason could be that the co-ordinator was aware of the strengths and weaknesses of her pupils and thirdly, because the co-ordinator believed that pupils should master the basics (Rowntree, 1977; Satterly, 1989; Airasian, 1994).



Not only was this co-ordinator assessing lower level objectives but also socio-affective behaviours. The term 'socio-affective behaviours' is used in this thesis to indicate processes that observed teachers were applying for gathering information and evaluating pupils which are not directly associated with pupils' academic progress.

Although this co-ordinator was not in a position to describe precisely those socio-affective objectives, she was found to assess them continuously on a daily basis. During informal discussions with the researcher, this co-ordinator often mentioned that she wanted to know, for instance, who needed encouraging to speak in class and who did not; who was interested in Language and who in Environmental Studies; whether a pupil made effort to learn. She indicated that she built up a stock of information about each pupil's preferences, motivation, values, work habits and personality, based mainly on her informal observations of the daily interactions with the pupils. It is also interesting to note that she kept all this information in her head. She was not observed to keep a written record of such pupils' qualities (Gipps, 1990; Broadfoot et al., 1991; Airasian, 1994). This lack of recording was apparently a disadvantage since all this information could have helped her make fair judgments and to provide proper support to individual pupils according to their needs. She seemed to attempt to develop both pupils' ability and interest in the subject, to judge pupils' social qualities and to control them at the same time.

Leadership was another quality which this co-ordinator was interested in when she was assigning group work to her pupils. Having identified some pupils with

this quality, she often utilised those pupils with leadership skills by placing them in groups that lacked such skills or by giving to them the main role in various classroom activities.

Another non-cognitive trait which this co-ordinator appeared to take interest in was trustworthiness. When this co-ordinator went out of the classroom, she liked to trust that certain pupils would carry on working.

*"I trust Devika to continue working in my absence. I can't say the same for Tony who will walk round talking and being a nuisance."*

This co-ordinator was observed constantly to attempt maximising attention and encouraging pupils' attention. One simple way for the co-ordinator to find out if her input messages had been received was to require pupils to participate. The co-ordinator was seen constantly prompting pupils to say something, in particular she attempted to encourage the participation of shy and inattentive pupils. Moreover, participation in classroom activities seemed to be an effective strategy the co-ordinator used to control pupils. Class participation, therefore, seemed to be a three-fold non-cognitive process. First, each pupil's participation in a group or class activity seemed to be a social and intellectual enterprise. Secondly, when the co-ordinator prompted a shy pupil to participate, she perhaps attempted to encourage the pupil, that is to foster an affective quality. Finally, very often the co-ordinator used the strategy of class participation in order to keep all the pupils busy so that she could easily control them (Pollard, 1985; Airasian, 1994). In one instance, the co-ordinator called on a girl to participate in the discussion when she



found her being inattentive and looking out of the window.

For this co-ordinator, interest was also focused on pupils' qualities such as compliance, conformity and obedience as the following illustrations show:

Co-ordinator: Because you did not complete your homework yesterday, you will not be having a break this morning.

Co-ordinator: All those who were making noise while I was away, will have to do extra homework.

Co-ordinator: You had a fight with Jane yesterday, her teacher told me. I will not let you play volley-ball this afternoon.

The inferences from these decisions could mean that the co-ordinator interpreted the pupils' behaviours as misbehaviours and also the fact that the first pupil did not complete the homework as not conforming to the rules of the class where it was customary for the pupils to complete homework. Thus the co-ordinator responded with withdrawal of the break and volley-ball privileges with the hope that pupils would learn from these experiences and avoid similar misbehaviours in the future (Child, 1986). The sanctions were also aimed at the other pupils.

There was an example of the teacher's assessment reactions, aimed at controlling the pupils, as the following examples show:

Co-ordinator: I don't like you two talking when I am speaking. Please pay attention to me.

Co-ordinator: Can you all listen to me? This is very important.

Observation of the co-ordinator at this school suggested that she made initial assessments at a very early stage in the school year to provide her information about each pupil to help her mold the classroom into a viable social environment. It seemed that the first few days of the schools were important and busy days for the co-ordinator and the pupils. It was these days that set the tone and perhaps laid the foundation for the rest of the year.

It was during these first few days of the school that the co-ordinator was observed to make every effort to learn about each pupil and the group as a whole and to organise them into a classroom society that was characterised by communication, order and learning. According to this co-ordinator, a class is a society made up of people who communicate with each other, pursue common goals and follow rules of order: *“I set up this society in the first days of school because a set of classroom rules and routines must be successfully established to promote a positive, social and learning environment”*.

This co-ordinator said that pupils learnt quickly that the fastest way to anger a teacher was not by doing poorly on a homework assignment or a test but by talking during classroom instruction or laughing at the teacher. Without rules and routines the classroom would be chaotic and instruction and learning would become very difficult, she argued.

In order to know how to group, manage, instruct, motivate and reward a group of pupils, this co-ordinator was observed to make an attempt to learn her pupils’



individual characteristics. Thus, the accomplishment of initial assessment took place at the start of the school year when she wanted to learn about each pupil and her class as a whole.

Collection of a broad range of information about individual pupils and the class was the first of the four stages of the initial assessment process at this school. At the first stage, the co-ordinator met each pupil who appeared different in facial expressions, dress, confidence and manners and tried to get to know them. This was what the first few days were like, as the co-ordinator tried to observe and learn enough about her pupils to form them into a social group who will work closely and in collaboration, and also that will permit classroom goals to be realised.

In this school, the initial assessment process often started before the pupils entered in the classrooms. One might be mistaken to think that a pupil was unknown to the co-ordinator before they met face to face, but this was not usually the case in this primary school. The co-ordinator's room was more than a place where she ate her lunch, planned her next class activity or corrected her pupils' test papers. It was also a place where the 'days activities' were exchanged.

If one was in the teachers' room, one was sure to listen to some of the teachers complaining about their pupils' inattentiveness in class or lamenting about their lack of motivation or poor learning ability. One could also hear about some of the pupils' demanding and interfering parents.

One does not have to know any of these pupils personally to begin forming impressions of them as pupils. The reputation of many pupils seemed to precede them into the classrooms and this co-ordinator who had never seen them already knew a great deal about their strengths and weaknesses. She was provided information about her pupils before the start of the school year in various ways.

There were times when the co-ordinator recognised the names of pupils she had taught on her class list. This gave her an indication of the type of pupil she could expect to meet. Normally it was teacher-to-teacher interaction that provided most of the information about her new pupils.

It was observed that the school's records were kept in the office and were available on all pupils. The co-ordinator said she looked at these before the start of the school year to get information about her pupils' abilities and prior school performance.

It was noted that test scores and other grades were available in the headmaster's office. This co-ordinator looked at these before classes started to get an idea of the capabilities of her class pupils.

The co-ordinator said that, before the start of the school year, she was notified if any pupil in her class had a learning disability and so should be receiving special help.

From the above discussion, it seemed that a number of sources was available to



the co-ordinator to help her in her initial task. These ranged from school records, teacher room comments, pre-class information to performance of siblings and parental comments.

What did the co-ordinator do in the second stage when she had to determine what types of information were useful in setting up a classroom learning society?

She said that, in lower classes, curriculum goals were both social and academic since pupils in these classes were generally less mature, less socialised and less independent than those in the higher classes. As a result, when she was teaching in the lower classes, she was keen to know if her pupils had special problems and how well they will adapt to the classroom's social situation. She said she was concerned with information that will help her form several young learners into a unified and orderly classroom society.

In the higher classes, where pupils were mature and had been participants in the system long enough to become socialised into its procedures and expectations, she sought information generally related to the achievement or ability level of her pupils and her interest in the subject matter to be taught.

It seemed then, that this co-ordinator wanted and needed some information about her pupils early in the school year. The type of information required, varied according to the level of classes. What else did she observe in the first week or so of school to help her get to know her pupils well? She said she could recognise who was motivated and who was not by the end of the first week of schooling.

She did this by basing her judgments on whether her pupils completed her homework and whether they attended her class everyday.

She said she also watched whether her pupils were courteous and whether they were late. She also watched how they interacted with other pupils. Furthermore, she watched their body languages. According to her, a lot can be learnt from the body language of the pupils. Although she was not interested in the ways the pupils dressed, it did, however, give her an indication of her pupils' styles.

As a result of this preliminary exercise, the co-ordinator said she became knowledgeable about her pupils in five main areas: home backgrounds, academic knowledge and skills, learning difficulties and needs, behaviour problems and outside school activities (Calderhead, 1983) as the following illustrations show:

*"I am aware about the home backgrounds of my pupils... the occupation of the parents...the schools attended by the brother or sister, the area he lives."*

*"I have information of the pupil's academic achievement...the skills he has or has not."*

*"I know whether my prospective pupils have any learning difficulties or needs...prior knowledge of the difficulties means that I can make the necessary arrangements."*

*"As a teacher, the more information I have about my pupils, the better it is. It makes it easier to understand my pupils".*



The fact that initial assessment information was readily available to this co-ordinator and could influence her perceptions of pupils before meeting them face to face, raised the question of how much she wanted to know about her pupils before the start of the classes.

When this question was put to the co-ordinator, her answers were: first, she wanted to know about any physical or emotional problems her pupils might have. If a pupil was subject to seizures or required periodic medication to control hyperactivity, she wanted to know this before the start of the class. Second, she wanted to know if any pupils had been diagnosed as having special needs, learning problems or disabilities. It was policy at this school to inform the classroom teacher about such pupils before the school started to help in the planning. Third, she expressed a desire to know about problematic arrangements of pupils in her class. She said she liked to know from the first day at school who should, for example, or more importantly, who should not, be picking up a pupil.

By the end of the first week of school, this co-ordinator said she was able to know whether each pupil was going to work, get along with other pupils and be cooperative. She watched how they got along with each other. She also watched the way the pupils entered the classroom. Also whether they were late, courteous, quiet and if they interacted. She also watched the pupils' body language.

This co-ordinator said she recognised whether her pupils were motivated or not by basing her judgment on whether or not her pupils had completed their homework and whether they had attended the class every day.

It seems, therefore, that during those first few days, the co-ordinator was constantly on the lookout, searching the environment for indications of pupils' characteristics. Sometimes her search led her to expected places: school records, prior teachers' perceptions and observing the way pupils interacted with them and their peers, both in and out of the classrooms. The search also led her to some unexpected places that would, on the surface, seem to have little to do with the main task of the school: their body language and discussions with other pupils.

Two characteristics of this early assessment information deserve attention. First, most of it came from informal observations or records. The co-ordinator did not rely heavily on tests or formal measurements to determine pupil characteristics. If she sought such information, and many did not, they often went to the school records where past performance was usually recorded.

Once data on her pupils were collected, initial assessments were synthesized by the co-ordinator into general perceptions of her pupils, producing pupils' descriptions as illustrated below:

*"Pierre is a nice and polite boy who comes from a family who must be middle class. He is very motivated and willing to learn. Has a lot of potentials. Will do very well academically and in sports. I am expecting him to be among the best five in the class."*

*"Sanita is athletic and good natured. Her ability is average. Really joins in with any activity that is going on and her work has been nice. Will do well."*



*“Amina walks into the class daily with a worried and tired face. Praising her work will produce a smile on her face, though the impact is very brief. She is shy but she will ask for assistance. I don’t know why she lacks motivation so much. There must be a problem at home.”*

These rich and detailed descriptions of pupils were gathered by the co-ordinator through observation rather than upon test score information. From these descriptions, she said she went on to make predictions about how well the pupils would perform during the school year. *“I am expecting him to do well.” “She probably will be this way all year.”*

This co-ordinator gave a vivid description to get a sense of the use and importance of initial assessment. She was asked by the head teacher to replace a teacher who was sick on a particular day. She entered the classroom with information about the subject matter that was scheduled to be covered but with little knowledge about classrooms’ routines or pupils’ personalities. After the start of the class, a boy at the back of the class raised his hand and asked to go to his locker to get a book he had forgotten. *“Should I let him go? Could he be trusted to return upon fetching the book, or will he wander in the corridors for a few hours? What is the teacher supposed to do here? What is the classroom policy for forgotten books?”*

A few minutes later, two boys got up and started to leave the room for remedial help for an hour with another teacher. This was what they apparently did on Tuesdays. *“Do they? Will they? Can I rely on the class to provide the answers? And will they tell the truth? How am I supposed to know all this? I am an outsider, stranger to this society.”* There was no question that the classroom

teacher will know the answers to all these questions. But a teacher replacing another colleague, not in possession of initial information, was likely to face certain difficulties in decision making just like the co-ordinator.

Initial assessment, therefore, provided the co-ordinator with the kinds of practical, nitty-gritty knowledge that made a classroom function (Bullough et al., 1992; Solas, 1992). Caught up in the demands of immediate decision making, the teacher cannot solve problems or reach decisions abstractly, based upon theoretical principles or theories.

*“We, teachers, must deal with situations that demand specific information about the pupils in those situations. What I do to stop Stephen’s misbehaviour may differ from what I do to stop Shanti.”*

*“Ralph needs special attention and reinforcement to perform well, but Gita needs to be left to herself to do her best.”*

*“Ahmed has a difficult home situation and requires special warmth and reinforcement.”*

The security of knowing the pupils also explained why this co-ordinator acted to maintain a consistent and stable perception of the pupils after her initial impressions were formed (Rist, 1970; Brophy & Good, 1974; Nisbett & Ross, 1980; Peterson & Barger, 1984).

If the co-ordinator believed a pupil to be of high ability and the pupil succeeded at a difficult task, the co-ordinator was likely to attribute the success to the pupil’s



ability. *“See, my initial assessment about this pupil is correct.”* If, on the other hand, an unexpected outcome occurred, such as a low ability pupil doing very well, the co-ordinator was likely to attribute the pupil’s success to a one-off situation due to an external factor.

The co-ordinator was observed to communicate her initial assessment perceptions to pupils in many different ways (Good & Brophy, 1980). Offhand comments tell individuals and the class a great deal about the co-ordinator’s perceptions. *“Oh Sarah, tell the class the answer to this problem”*; *“Didn’t Carl read this paragraph with a lot of expression”*, *“Don’t bother Johnny, it’s too difficult for you. Let Priya have a go instead.”* Sometimes perceptions were conveyed indirectly, as when the co-ordinator waited patiently for one pupil to think through a problem whilst to another pupil, she allowed just a few seconds. In another example, the co-ordinator expressed encouragement and assurance to one while to the others, she asked to take at least a guess. The tone of voice, gestures and seating arrangements all indicated to the pupils how they were perceived by the co-ordinator in the classroom.

Initial assessment was, therefore, done by this assessment co-ordinator very early in the school year to provide information that will help mold the classroom into a viable social environment.

## **5.5 Overview**

In the first section of the conclusions, an outline of the findings in this case study is given in response to the research questions on classroom assessment. In the

second section, the findings from the observation of the co-ordinator are presented.

### **5.5.1 Responses of the Assessment Co-ordinator**

For the first research question, “why do you do classroom assessment?”, the assessment co-ordinator said she did it for three main reasons: to provide feedback to the pupils, to monitor the progress of the pupils and to evaluate the lessons.

How did she conduct classroom assessment? She said she did it by questioning the pupils during instruction to check if the pupils have understood the lessons and also by questioning at the end of a lesson to evaluate the instruction.

The third research question put to her was the content of classroom assessment.

What did she assess? She said she assessed mastery of basics, affective and social domains.

When the assessment co-ordinator was conducting classroom assessment, did she face any problems, and if so, what measures did she take to resolve them? She faced two problems: difficulty in assessing several pupils simultaneously and lack of time to assess all the pupils. To resolve the two problems, she gave them homework and also did the marking with the pupils when there was available time.

The co-ordinator was also asked about the use and influence of the Learning



Competency document. She said that her teaching methods had been influenced by the use of the document and that she used it for planning her daily lessons and for deciding on a pupil's achievement.

The next section looks at the findings from observing the assessment co-ordinator. Did she do what she said she was doing?

### **5.5.2 Findings from Observing the Assessment Co-ordinator**

At interview, the co-ordinator said she is a very systematic person and this was evident in her planning. She includes charts, diagrams and long lists of examples she might need and use in her teaching. Her long - term planning indicated attention to the curriculum. Her planning is based on a thorough understanding of curricular requirements.

The co-ordinator adapted instruction based on teaching and assessment information. She used whole group lessons to allow groups to explain the processes and the products of their work. The co-ordinator listened and reformulated the explanation to clarify the process or the concept intrinsic to the work. The co-ordinator used questioning to lead the pupils to a better understanding of the concept. She tried to make connections between information and concepts learned. This had the effect of scaffolding learning. However, while she added and adapted her explanations, she did not appear to change her materials or the tasks very significantly. However, more time, specific instruction and extra practice were evident in observation.

The co-ordinator's assessment practices can be summarised as follows:

- The whole class sat quietly at tables and watched her at the front of the class. She drew out answers through a series of questions. She added concepts and theory. These sessions occurred at the beginning and also at the end of a lesson.
- Whole class lessons with a group or an individual pupil discussing their work. The co-ordinator used these opportunities for giving praise and feedback that helped scaffold further learning.
- Quiet, independent work at tables. Most of the Mathematics, writing and reading was done in this way.
- Group work involving investigative tasks.

The last two methods occurred simultaneously. Pupils either worked at the tables or were rotated to the other side of the classroom to do investigations or project work. About half of all instruction was devoted to whole class teaching. She said she liked to teach whole class because "*it was a good method*".

Although the co-ordinator felt that she perhaps spent too much time in whole class teaching, it was observed that this method provided a means of using several important assessment strategies.

- Feedback was given to the whole class but done in a collaborative way. Praise was integral in the feedback. The processes required by the work were illustrated by either the co-ordinator or the pupil or expressed mutually.
- She made use of pupils' exemplars to help pupils understand the goal or the



process to achieve the goal.

- Whole class lessons were used to summarise what was learned and connect it to other work or concepts studied in class.
- She modeled the process herself or guided a pupil through the process in front of the other pupils.
- Her questioning was either open or closed-ended but she also asked a wide variety of pupils and got information about their understanding from their answers. Although the co-ordinator was at the front talking, the pupils were asked for examples, suggestions or ideas in a collaborative way. She asked as many pupils as possible. When the pupils continued to work in a whole class lesson, she followed up by walking around and checking each pupil's work and giving feedback.

These findings coincide with conclusions made by Gipps and Tunstall (1996) which suggest that involving the whole class in discussion where the locus of responsibility was in some way shifted to the pupils, provides extensive learning opportunities. Analyses of the teacher's observations indicated that she did attempt to elicit criteria specific to learning through questioning and feedback.

There was extensive evidence that the co-ordinator used modelling and guided practice in her teaching. In group tasks, for example, she would observe and note a problem, ask a question, offer a clue to a way forward and then let the pupils work collaboratively toward a solution. Pupil or expert exemplars were used routinely. Though it was not evident in her notes, the co-ordinator did attempt to feed forward her understanding of pupil learning particularly relating to the

progress of the whole class. She used her reflections on pupil understanding to modify her whole class learning.

In assessing learning, this teacher asked questions about methods used most often when discussing a product already or nearly completed. She asked the pupils to explain their methods and understanding.

Part of classroom assessment involves collecting and recording information on pupil achievement as well as communicating the information to the learner. It was observed that the co-ordinator set up situations where assessment could be collected and communicated or feedback could be effectively used. The co-ordinator made checklists for coverage of topics but not for achievement or learning.

The co-ordinator observed the pupils at work informally but did not conduct any formal observation session. She did not make any anecdotal notes while she observed the groups at work. When asked about assessing pupils through formal and informal observation, she replied, "*There is no possibility of writing and watching at the same time.*" She did not make use of anecdotal notes but relied on memory for all her information. She only noted extreme cases of good or poor achievement.

There were no tests used in the class. Investigative tasks were the principal mode of learning and these were not evaluated or assessed in any formal way other than the notes or charts the pupils produced. The co-ordinator appeared to rely on



discussion at the end of lessons to gather information on pupils' learning.

This co-ordinator depended significantly on her memory for assessment information. She appeared to be a critical intuitive (MacCallum et al., 1993). She reported that she could not assess and teach at the same time, although she did this very frequently in her work with groups and her whole class discussion. The co-ordinator felt confident about her use of the National Curriculum and knew what the levels were designed for. She said she goes on to the next level if she can stretch someone. It was true that she added more to the science activities than was required by the curriculum. However, she was not as systematic about her assessing as she was with her planning. There was some discrepancy between what she said she did and what she actually did in assessing pupils.

This co-ordinator was reflective about the ways in which connections between concepts could be incorporated into her teaching. Her efforts to draw connections between lessons were evident throughout her teaching. She appeared to act on her assessment of the efficacy of her teaching while she was teaching rather than after when she added more explanation and more theory. The importance of reflective thinking as an underpinning to effective assessment was again made evident through this case study, as it was in the case of St Anne school. In summary, this co-ordinator (i) exhibited a problem-solving approach to pupil learning and to her own teaching, (ii) manipulated her classroom organisation to collect information on pupil learning, (iii) used a variety of questions directed at articulating the processes behind her own thinking. She asked questions that required the pupils to do the same and (iv) made moves to develop a collegial relationship with her

pupils.

From this case study, a new category relating to feedback was added to the analysis. Some feedback comments by the co-ordinator connected new concepts and learning to other concepts the pupils had studied or discussed. Making connections, finding similarities between learning tasks and relating them to real life examples are elements of this feedback. The co-ordinator explained the connections explicitly and engaged the pupils in the generation of more examples of connections as part of her feedback.

Secondly, as a method of gathering data on the communication of criteria for achievement, interviews of pupils about their work will be added to the data collection schedule at the next study setting. Pupils will be asked how they know their work is good. New categories may be added following analysis of those interview transcripts.

Apart from providing feedback, this co-ordinator was noted to conduct classroom assessment for diagnostic purposes to make appropriate decisions.

At this school, the co-ordinator was concerned with the four core subjects: English, Environmental Sciences, French and Mathematics. She was observed to be assessing the lower level objectives of Bloom's (1956) taxonomy. There may be several hypothetical reasons for teaching and assessing lower level objectives: easy to assess, stress on the basics or awareness of the strengths and weaknesses of the pupils by the co-ordinator.



Socio-affective behaviours were also assessed by the co-ordinator. She wanted to know, for example, who needed encouragement and who did not, who had leadership qualities, who was trustworthy and who was participating in the classroom activities, and also who was interested.

Finally, this co-ordinator made initial assessments at a very early stage in the school year to provide her information about each pupil to help her mold the classroom into a viable social environment.

This co-ordinator did not have time to record the progress of each pupil. She kept all these in her head. She said that too many others asked for information.

## Chapter Six: Case Study – St Anne School

### 6.1 Introduction

St Anne school is a low performing school located in the urban areas. This three - storey building had 437 pupils on the school roll and they came mainly from lower socio-economic backgrounds. The school staff included one acting headteacher, three deputy headteachers (one for the Oriental Languages) and twenty - nine teachers who were all employed on a full-time basis by the Ministry of Education and Science. The percentage pass at the CPE examinations was around 35%.

There was no clear policy on assessment, although the assessment co-ordinator said that several meetings were held to establish one. The co-ordinator said that summative assessments took place at the end of each term for the purpose of reporting pupils' attainment to parents, pupils and teachers. In interview, he suggested the Ministry's in-service training on assessment had been insufficient to support any change in practice by the teachers at the school. He commented that *'most of the training was about trying to cope with the documents and understanding what it meant.'* The teachers had attended some courses on the use of the curriculum but the school did not change other than statutory requirements. There are too many Learning Competencies to cover. The Learning Competencies were not introduced to the teachers before it was announced in the media and this caused initial resentment. Over the past two years, the assessment co-ordinator had read the Learning Competencies carefully and found it helpful in many ways. He suspected the Learning Competencies writers were not primary teachers because of the emphasis on



subjects. The Learning Competencies are useful in describing what has to be taught but not really useful because pupils do not learn in a continuum. He explained that, in his view, some pupils make leaps and some learn by rote first. Smith & Andrews (1989) found that effective head teachers were most often engaged with their teachers in four kinds of strategic interactions, including those of a resource provider, instructional resource, communicator and as a visible presence.

The headteacher of St Anne school did not appear to be an instructional resource provider on a daily basis because he was very busy teaching and doing the work of the head. He was, however, a very visible presence and came into the classes at least once every day. He took on the role of a communicator and could be seen as a resource provider through his work on the assessment policy and the yearly planning sheets. In Hall & Hord's terms (1987), this head was an initiator but one of the effects of the pressures of rapid curriculum change was to make him more cautious. Protecting the teachers seemed a part of his reaction to changes he was not certain would be beneficial. Fullan (1991) suggests this as an understandable response to changes imposed from outside the school.

The staff of the school had conducted meetings to establish an assessment policy. They did not write the policy together but they attended the meetings and listened to a discussion of the principles of assessment relating to the new curriculum. The document clarifies the values and understanding of the staff relating to the summative and formative functions of assessment. According to the staff, *'underpinning our*

*assessment practices is an agreement that assessment is the daily bread and butter of the good primary school teacher.* Working with individual pupils, assessing precisely their level of knowledge and understanding in order to plan the next experience or activity is the assessment that informs a teacher's daily practice. Summative assessment takes place at set times in order to record, very often for the purpose of reporting to parents and other teachers, a pupils' attainment at a set time. The document reveals a confident understanding of the summative/formative distinction. The emphasis on daily practice is clear. It should be noted that the teacher strategies for conducting assessment in the Assessment Policy are described as *'brief observations of individual pupils that arise out of daily curriculum activities and feed into teachers' planning.'* The school had no moderation process with other teachers in the school but the head teacher indicated that this would begin soon.

There were eight teachers in standards IV, V and VI at this school. There were two teachers each in standards IV and V, while standard VI had four teachers. One teacher from the eight teachers acted as the assessment co-ordinator. At interview, the teachers were asked a series of questions on why they were doing assessment, their assessment practices and what they were assessing. There were further questions on the use of the Learning Competencies document for planning daily lessons, deciding on pupils' achievements, diagnosing pupils' strengths and weaknesses and whether their teaching methods had been influenced by the use of the Learning Competencies document.



Overall results are summarised in tables of frequencies. Percentage totals exceed one hundred in tables since multiple responses were possible.

After the interview, the assessment co-ordinator was observed. This was done to explain what the teacher believed to be her classroom assessment practices and the influences which have shaped her thinking and work. The observational data was used to confirm or question her self - report.

## **6.2 Results from the Interviews**

The literature review showed that assessment in the classroom is an integral part of the teaching and learning process. Teachers constantly assess every aspect of pupils' performance for various reasons (Broadfoot, 1979; Shipman, 1983; Stiggins, 1985; Satterly, 1989; Rowntree, 1991; Airasian, 1994; Pollard et al., 1994).

Data were collected by observing the assessment co-ordinator as part of the study to supplement the semi-structured interviews data and also to provide first hand evidence of the classroom assessment practices. Such evidence was not available from the interviews. These observational data might verify or dispute what teachers assert they do when they were interviewed. In other words, these data will indicate whether what they said they did was what they actually did during the assessment phases.

Since classroom interactions and assessment activities are too complex phenomena,

chapter 6 attempts to present those observed in a rather summarised and organised manner. There will be several excerpts (short/long) from the observations to indicate why teachers were assessing, how they conducted assessment, what they assessed, the problems they encountered and the methods for resolving them.

It is hoped that this kind of presentation will enable the reader to have a clear understanding of the practices involved in these situations. But before presenting the observation data, results of the semi-structured data are presented in Tables 20 to 24 to get the views of all the teachers of St Anne school.

**Table 20: Purposes of Classroom Assessment**

Purposes of classroom assessment	Responses (N=8)			
	Std IV	Std V	Std VI	All Teachers (%**)
To provide feedback to the pupil	2*	2	4	8 (100.0)
To diagnose pupils' difficulties	1*	1	3	5 (62.5)
To evaluate the lessons	0	1	0	1 (12.5)
To monitor the progress of pupils	2*	2	4	8 (100.0)
To stress the main concepts	1	2	0	3 (37.5)
To communicate information to the parents	2*	2	4	8 (100.0)
To provide feedback to the teacher	1	2	4	7 (87.5)
To motivate the pupils	1	1	3	5 (62.5)
To provide remediation	1	2	3	6 (75.0)

\*includes the response of the assessment co-ordinator

\*\*The percentages exceed one hundred since teachers could provide more than one answer.



Teachers were asked why they assess their pupils and the roles of assessment in aiding teaching and learning. Table 20 gives the responses of teachers of St Anne school. At this school, providing feedback to the pupils and communicating information to the parents were the two main purposes of classroom assessment. All the eight teachers mentioned these two purposes. Five out of the eight teachers also said that they did assessment to diagnose pupils' difficulties. Three out of eight teachers mentioned that they did assessment to stress the main concepts. Seven of the teachers interviewed said they did assessment to give them feedback, while six teachers did to provide remediation to the pupils.

There were four main reasons for the assessment co-ordinator to assess her pupils: to provide feedback to the pupils, to diagnose the pupils' difficulties, to monitor the progress of pupils and to communicate information to the parents.

These are the comments of some teachers about the purposes of classroom assessment.

*"When I correct pupils' work, I always have the pupil whose work I am correcting with me. This way I am able to explain where the pupil has gone wrong and how he/she could improve in future tasks I would be setting."*

*"I gain constant feedback from the pupil by observing their reactions, their body language as well as what they say. I always ask the pupils as a matter of habit if they*

*have understood. Whatever their answers, I am able to know whether or not my pupils have followed the lessons by 'reading the eyes of the pupils. When I see blank eyes, I realise something has gone wrong and I react immediately.'*

*"I like to communicate information to my pupils and also to the parents. The information given to the parents are mostly grades, marks or brief teacher comments that are in most cases, meaningless. This leads the parents to ask for more clarification about their children's progress from me."*

**Table 21: Conduct of Classroom Assessment**

Classroom assessment practices	Responses (N=8)			
	Teachers Std IV	Std V	Std VI	All Teachers (%**)
Close observation of a pupil working	2*	2	4	8 (100.0)
Questioning at the end of a lesson to evaluate the instruction	1*	2	2	5 (62.5)
Questioning during instruction to check if pupils have understood	2*	1	2	5 (62.5)
Homework	0	1	2	3 (37.5)
Workbooks	0	1	2	3 (37.5)
Comments	0	0	3	3 (37.5)
Tests	1	2	4	7 (87.5)
Correction of work	2*	2	4	8 (100.0)

\* includes the response of the assessment co-ordinator

\*\*The percentages exceed one hundred since teachers could provide more than one answer.



In an attempt to draw a picture of how the respondents said they applied assessment in their day to day classroom practice, they were asked how they conducted their classroom assessment. All the teachers said they did it through close observation of a pupil working and correction of work. Five out of the eight teachers said they conducted assessment by questioning during instruction to check if pupils have understood and also at the end of a lesson to evaluate the instruction. Three teachers mentioned homework, workbooks and teachers' comments while seven of the teachers said their assessment practice was testing.

As for the assessment co-ordinator, she said she conducted classroom assessment practices using three methods: close observation of a pupil working, questioning at the end of a lesson to evaluate the instruction and correcting pupils' work.

**Table 22: What was Assessed**

What was assessed	Responses (N=8)			All Teachers (%**)
	Teachers Std IV	Std V	Std VI	
Process	2*	2	4	8 (100.0)
Product	0	2	2	4 (50.0)
Mastery of the Basics	2*	0	0	2 (25.0)
Affective Domain	1	0	0	1 (12.5)
Social Domain	1	0	0	1 (12.5)
All round development	0	0	1	1 (12.5)

\* includes the response of the assessment co-ordinator

\*\*The percentages exceed one hundred since teachers could provide more than one

answer.

The teachers at this school were asked what they assessed during their assessment practices. All the teachers said they assessed process. Four teachers (two from standard V and two from standard VI) assessed process. Two teachers from standard IV said they assessed mastery of basics, while one standard IV teacher mentioned either affective or social domain.

The assessment co-ordinator said she assessed mastery of basics and process.

**Table 23: Problems Faced by Teachers during Assessment**

Problems faced by teachers during assessment	Responses (N=8)			
	Std IV	Std V	Std VI	All Teachers (%**)
Lack of time to assess all the pupils	2*	2	4	8 (100.0)
Lack of formal training	2	1	0	3 (37.5)
Difficulty in assessing several pupils simultaneously	2*	2	4	8 (100.0)
Disruptions	2	2	3	7 (87.5)
Noises	2	2	4	8 (100.0)
Personal reasons	1	1	2	4 (50.0)
Ministry	1	2	3	6 (75.0)

\* includes the response of the assessment co-ordinator

\*\*The percentages exceed one hundred since teachers could provide more than one answer.

What are the problems faced by the teachers of this school when they were



conducting classroom assessment? Eight teachers mentioned three problems: lack of time to assess the pupils, difficulty in assessing several pupils simultaneously and noises. Seven teachers mentioned disruptions, while three standard IV teachers said the problems they were faced with was lack of formal training in assessment. Four teachers mentioned personal problems, while six out of eight teachers said the Ministry was a problem in the implementation of the classroom assessment.

At this school, if teachers did not have enough time to assess their pupils, they said they assessed their pupils on the next day prior to the start of the lesson. Sometimes they shortened the length of the lessons. They also made sure that pupils were given homework on the topics covered.

The assessment co-ordinator at this school was faced with two problems: lack of time and difficulty in assessing several pupils simultaneously. How did she deal with these problems? She said she planned a series of tests on topics to assess her pupils.

The teachers of St Anne school were also asked about their use and influence of the Learning Competencies document in their everyday assessment activities in the four core subjects.

In each core subject, all the eight teachers in the three standards used the Learning Competencies document to plan their daily lessons. They also said that their teaching methods had been influenced by the Learning Competencies document. Between two

and five teachers said that they used the document to decide on a pupil's achievement, while between three and five teachers said they used it to diagnose a pupil's strengths and weaknesses.

**Table 24: Use and Influence of Learning Competencies Document**

Use and Influence of Learning Competencies Document (N=8)	English	EVS	French	Mathematics
	Teacher	Teacher	Teacher	Teacher
To plan my daily lessons	8*	8*	8*	8*
To decide on a child's achievement	6	2	4	5
To help diagnose a child's strengths and weaknesses	3*	5*	6*	6*
My teaching methods have been influenced by the use of the document	8*	8*	8*	8*

\* includes the response of the assessment co-ordinator

The assessment co-ordinator said her teaching methods had been influenced by the use of the document and she used it for planning her daily lessons in the core subjects.

This section presented findings from the teachers' (including the assessment co-ordinator) semi-structured interviews. However, these findings have to be treated with caution, since they express what teachers said they did, not necessarily what they actually did in their respective classrooms. In order to cross-check the consistency of



what they have said, the next section presents findings from actual observations in the classroom. This is to find out if what the assessment co-ordinator said she did was what she actually did.

The next section presents findings based on the researcher's field notes gathered during the three terms of field work from direct observations. It will be interesting to see which classroom assessment practices the observed co-ordinator fulfilled when she was doing assessment.

### **6.3 Assessment Co-ordinator: Background**

The assessment co-ordinator was 35 years old at the time of data collection and had been teaching for twelve years. She had taught at this school for five years. The co-ordinator said she had been trained in observation techniques and that the course was a very useful one.

Her daily routine was as follows: making sure that the pupils become independent of the teacher. This was mentioned several times. It appeared that the pupils were aware of this routine. They mentioned that they had to get to work on their own. All classroom routines appeared to be built upon this foundation. Directions posted around the class read as follows: "*put down your chair and read a book*". Pupils were to begin these tasks immediately upon entering the classroom.

#### **6.4 The Assessment Co-ordinator in Action**

This co-ordinator organised her planning in integrated subject topics. For example, the topic for the autumn was circles and spheres. From this topic, she was able to plan the other subjects. The co-ordinator said that for Science planning, she used her own methods but planned from the curriculum to the activity instead of the other way round as she did for other subjects. Usually she decided on a topic that will be exciting to the pupils and then she made sure that they covered as many of the learning competencies as possible. This co-ordinator had no Science training and thus felt less confident in Science planning. This school required plans to be handed in.

This assessment co-ordinator's planning material took three written forms that were as follows:

- Whole term planning sheet – legal-sized sheet with subjects along the side. Concepts only were listed.
- Topic plans for her use – lists concepts, skills, attitudes and resources.
- Her weekly plan – the weekly plan listed activities, time schedules and lists of materials to prepare.

This co-ordinator's plan sheets were updated during the week. This provided evidence that she adapted her planning and teaching based on her assessment of the pupils' understanding and progress in their lessons. Use of assessment data in this way can be seen as an attempt to feed forward into planning. At interview, this co-



ordinator claimed to update her planning as the need arose or if activities took more time. Information about her programme and its effectiveness was gathered during instruction through her frequent use of discussion sessions at or at the end of a work period. The pupils were divided into mixed ability working groups for a work session of around one hour in length. At the end or sometimes at the beginning before another group started on a task, the pupils came together where an activity took place. The co-ordinator's method of self-evaluation appeared to involve two steps. Firstly, she asked groups of pupils to explain to the others what they had been doing and what they had found out. She listened to this and asked questions about the process and what they understood from what happened. She then appeared to modify the resources at the task table or add information to her instructions to the next group based on what had happened in the first group's experience. The preceding group was kept aware of how the work was developing or reviewed the concepts to be learned through the task at the end of session discussions led by other groups.

Secondly, she observed the pupils at work and watched for problems in both process and product. Again, she used the problems one group revealed to change her instructions or materials before the next group tried it. It should be noted that she tried not to tell them any particular answer or concept until they had discovered it in part by themselves. She tried to leave more clues.

A number of problems were observed with this approach in the context of the busy

classroom. A great deal of time was needed for each group to work at a centre. Time was also required for pupils to finish their work or move to the centre to listen to the pupils talking about their work. The shift sometimes took up to ten minutes. Secondly, some pupils did not seem to listen attentively to these whole class sessions when they were sitting or standing around a centre in-groups. Many did not appear to benefit from the discussions except when their groups were directly involved. In addition, the use of centres where pupils are talking to each other heightened the noise level of the classroom. The co-ordinator had to monitor work constantly so that pupils were kept on task. When the pupils returned to the whole class session, they had trouble sitting still and changing their learning style from active engagement and talking to active listening. Some of the pupils found it very difficult and the co-ordinator had to shout out at the group to remain quiet. However, the instructional format where pupils moved to centres and then returned to whole class teaching provided opportunities for feedback related to improvement, revealed the emergent criteria and allowed the co-ordinator to collect information on current understanding through the use of genuine questioning; all strategies important to classroom assessment.

An example of her practice in Science involved a science exploration in making shadows. The following excerpts took place over three consecutive days. On the first day, the co-ordinator asked a group of pupils to make puppets and then try to make eyes that show up on their puppets. Her instructions were to make the faces show. The goal was made clear but the method was not. A screen, a light and a table



of materials had been set up for them to use. The pupils worked and discussed the problem for twenty minutes. The co-ordinator worked with other pupils but came by and watched them work thrice during the thirty-five minute period. She did not ask any questions at this first session but observed the difficulties the pupils were having. At the end of the lesson, the whole group sat near the table and the co-ordinator directed questions to the group and the class.

Co-ordinator: What makes a shadow? Which bit is it? The dark or the light? (She put her hand in the light).

Pupil: The dark.

Co-ordinator: Which bit of the puppet makes it?

Pupil: The light - the front bit. It's blocking the light and then the thing is a shadow.

Co-ordinator: It's certainly got something to do with blocking it. If I put something in front of the light, (she picks up a ruler on the table) what's the ruler doing?

Pupil: It's making the shadow. It's locking the light.

Co-ordinator: Have seen shadows like these before?

Pupil: (many hands up and lots of comments)

Co-ordinator: Where?

Pupil: When the sun shines you can get a shadow on the floor.

Co-ordinator: Why is it so?

Pupil: The sun is very light and it makes it dark.

The questioning here is both closed and open-ended. In the beginning, the teacher is looking for specific content answers about creating shadows. She wanted to pin down exactly how shadows are created. Her 'why' question to one of the pupils near

the end of the exchange attempted to uncover more of the reasoning used to understand shadows. The assessment co-ordinator commented that it was obvious to her that the group did not yet understand how shadows worked. She seemed very frustrated at the outcome of the session in some way. The assessment co-ordinator used observation and questioning to find out what the pupils' current understanding and skill might be and to find out whether the task or class activity has developed their understanding.

The next day, another group worked on the puppets with the same task. Before working, the assessment co-ordinator reviewed the discussion about blocking the light with this group and had added other materials to the resource table. On this day, some of the materials had holes in them. There was some computer paper, some letter shapes and some scissors. She added these because of the previous day's discussion. She said they needed more clues and perhaps the work was a bit hard. This group tried several pieces of material in front of the light. One pupil tried the computer paper and the dotted holes at the side made a clear shadow pattern. The assessment co-ordinator saw this and had the pupil explain what happened to the others in the group. They then cut out eyes in the puppets. This group presented to the class again at the end. What follows is an excerpt of that whole class discussion.

Pupil: She cut it out to make a face.

Co-ordinator: It did not have holes and she hoped that the drawing would show on the shadow and did it?



Pupil: No.

Pupil: I could see it. The picture....

Co-ordinator: No. The next person cut out some holes to make a face that was but when she put her hand in the holder she made in the back. Did it show?

Pupil: No.

Co-ordinator: Why not?

Pupil: Because the hands were squeezing the hole.

Co-ordinator: I am not sure what that word is. You mean it is blocking the holes?

What do you want the holes for?

Pupil: Make the face go up.

Pupil: The light had to go through something to make the thing work.

The assessment co-ordinator could see that though the group had figured out the method of making shadows they still did not know why it worked. The assessment co-ordinator had summarised and reinforced the process but the conceptual understanding was clearly not there yet. When the pupil said squeezing the hole, the assessment co-ordinator realised that they did not understand that the hand was inside the puppet blocking the light. This information pinpointed exactly what the pupils did not understand. The assessment co-ordinator wanted clarification of the understanding, so she wanted more explanation. She used the phrase, 'I am not sure what that word is' and then adds the term 'blocking' in exchange for 'squeezing'. The opening phrase, 'I am not sure what the word is', admits to the pupils that the assessment co-ordinator does not understand what they mean, suggesting that their

information is genuinely useful to her and that their thinking is valued. This could be an indication of the teacher's attempt to share power with the pupils, although this was a highly structured lesson format. After the assessment co-ordinator gathered the information, she added another demonstration to the class to 'scaffold' the learning in the zone of proximal development. She went to the puppet centre and demonstrated the process again for the group and the whole class.

Co-ordinator: (She turns on the light in front of the screen). OK, Nothing in front of the screen at the moment, is there?

Pupil: (Several of them) No.

Co-ordinator: You can see all of the screen is nice and bright and light. (She puts the puppet on her hand in front of the light). When I put my hand in that holder the holes are blocked. My hand is blocking them. So what do I do next?

The assessment co-ordinator had modified her planning by adding to the materials and adding explanations. She noted these changes in her daily plan, indicating that more time would be needed in whole class explanation and small group work. Her questions and observations allowed her to learn from each group's experience with the task. The assessment co-ordinator recognised that the first group did not achieve the goal but that they had a go and learned the concept from the class examples and discussion, as well as from their own experience with the task. In many cases, she gave time for extra work so that all pupils completed the task. In this case, she had several groups work on puppets at various times. Her assessment was that they still



did not really understand the concept and needed to experiment and make shadows repeatedly and in different ways. She appeared frustrated at times with this task especially at the amount of theory that had to be added to the experience. She had hoped the concept would become evident in the process. This frustration reinforces the conclusion that this teacher believed in the child-centred approach where pupils discover concepts on their own with guidance. She seemed to be uncomfortable with the fact that they needed so much scaffolding of their thinking. The assessment co-ordinator also acknowledged the pressure of time. She was determined to continue teaching in the way she thought best for the pupils but this was done at the cost of not covering everything on the curriculum. This feeling reflects the findings of the study of Key Stage One, conducted by Pollard et al., in 1994. They found the feeling of pressure universal amongst the teachers they interviewed and a sense of loss of the close affective ties many teachers had developed with the pupils in their class. This was intensified if the assessment co-ordinator felt a strong conflict between the demands of the curriculum and the needs of the pupils. The assessment co-ordinator used this method of group trial, group explanation with teacher input, use of pupil exemplars and subsequent trials by other groups in other subjects during the data collection period.

During teaching, the co-ordinator carried out three practices intended to collect information on pupil understanding: (a) initiating group discussion was a strategy used frequently to provide them with insight into pupils' ideas. She used open-ended process questions to probe understanding. She asked the pupils to explain what they

had encountered in a task to the whole class and she used the pupils' ideas for problem solving.

For example, the pupils had been creating number lines and using unifix to count backwards from fifty as a whole class exercise while taking attendance. The co-ordinator asked how many were in class and how many were away. At the front, she used a big number line to count back three absentees from thirty.

In this example, teaching was integrated with assessing understanding. The phrase "I want you to tell me how" supports this. Comments such as these were sorted under a "ask how /why" category, and it was evident the co-ordinator used this phrase in all subject areas. A limiting factor here was that when questioning in this group setting, however, the co-ordinator learnt only about the pupils who responded. The understanding of those who were not chosen or did not volunteer remained unknown. The co-ordinator, however, questioned in the same way with groups of two as well.

Another example was drawn from a situation where two pupils were working together. The co-ordinator watched them complete their number lines with their own system of recording before she asked them a question.

Co-ordinator: How do you know 25 is wrong?

Pupil: It's not a circle.

Pupil: Because there's a pattern and the one before is a circle.



Co-ordinator: That's the way to do it ---- Good.

The co-ordinator again was asking a question to probe understanding. The pupils both offered explanations which together formed an explanation of their thinking.

In this practice, the co-ordinator collected samples or recorded ideas from conversations she had with pupils to use in teaching and for the end of term reporting.

Pupil work was put in a sample folder. This was sometimes shown and discussed with parents when they came in with pupils in the morning. However, other than communicating with parents, the sample folder was used primarily for reporting. Observational notes were put in a separate binder under the name of each pupil and used for reporting as well. This information was not communicated to the pupils at all times.

Over the period of a two weeks to a month, the co-ordinator tried to observe the pupils without interacting with them. She said she often wrote notes on how the pupils worked. This was to give herself feedback on her planning and about the pupils' work habits. According to her, this worked because she had stressed independence when they are working. The co-ordinator sat beside a group of four pupils while they were working on a writing project. She divided a page into four sections and wrote their names in the sections. Then the co-ordinator sat beside the group table and watched them work and wrote down what she saw. She did not

she speak with the pupils initially, although she had to tell other groups to be quiet. She wrote down several points about one pupil. There was another pupil who was doing Mathematics and she asked to get out something to write. If the co-ordinator noticed a pupil looking at her during observation, she looked down or wrote something or looked at another pupil's work. She did it, she said, to reduce the pressure on the observed pupil. Then, she told one pupil to put more clues in his writing. This is a phrase she used very often throughout the reading and writing activities. This was meant to include spaces between words, correct ending sound, and punctuation where necessary and so on. Then she asked a pupil to read aloud from his story writing. Although this co-ordinator said she did not usually ask questions, on this day, she did ask a few questions:

Co-ordinator: What is this? A story?

Pupil: Yes. It's a story.

Co-ordinator: What's the ending?

Pupil: *(No reply)*.

Co-ordinator: Is it a story or not?

Pupil: Yes

The co-ordinator said later that she wanted to know if the pupil understood what a story was. Also whether they knew what the beginning and the end are. For her class, knowing how to do this is part of what the co-ordinator called proper writing. She defined this to the pupil more than once and gave some detail of the criteria involved.



In language, the co-ordinator communicated the criteria relating to the process or strategies her pupils should apply to working. For example, whole class lessons on reading and writing relied upon her explanation of strategies and modeling. This teaching method may be called an initiation into process. During the observation period, the instruction included:

- Model the story writing process by writing together on large paper in front.
- Model letter formation on paper and in the air.
- Read together looking for 'clues' i.e., sound patterns, length and shape of words and punctuation marks.
- Repeat the criteria for success before, during and after the lesson.

An example of this process was observed one day before the co-ordinator conducted a formal observation session. She first explained what she was looking for in their writing. The criteria were explicit and the pupils appeared to know it well:

Co-ordinator: I will be looking for spaces between words. What else I should be looking for?

Pupil: Our patterns...sounds

Co-ordinator: Very good. What else I will be looking for?

Pupil: Proper writing

Co-ordinator: And what is proper writing?

Pupil: (*mumblings*).

Co-ordinator: Go on. Say the letters. What's proper writing? I am going to do some watching of your writing and I will tell you what I learn at the end.

It appeared that the pupils were very familiar with the phrase "proper writing". Reading and writing both appeared to be part of proper writing because the process involved reading the work out aloud after they have written down. This criterion was often repeated in class and the pupils knew them but they revealed widely variable stages of achievement. Some pupils who could say what proper writing was had long streams of letters and spaces put in randomly and then told an impromptu story about them. Others were putting in spaces, clues and punctuation and could read their work aloud. In analysing the criteria inherent in academic subjects, Sadler (1983) described four types of criteria related to learning: regulative, logical, prescriptive and constitutive. Sadler referred to regulative criteria as the rules governing uniformity of presentation and organisation such as spelling, structure, grammar and other aspects. Logical criteria referred to chains of reasoning. Prescriptive criteria were used in evaluating quality, while constitutive criteria defined the key concepts and cognitive processes that governed the subject.

When this co-ordinator articulated what is meant by "proper writing", her explanation directed the pupils to regulative criteria to be sure, but perhaps also to the constitutive criteria. This was when the co-ordinator listed the rules or correct form required by writing such as spaces between words. The empirical facts of performance seen in the writing can be judged. But the co-ordinator was also introducing the constitutive



processes underlying writing as it was interrelated with reading. The co-ordinator, here, was directing the pupils to the processes of literacy as well as its formal structure.

Co-ordinator: What is proper writing?

Pupil: Reading your own writing.

Co-ordinator: Yes, that's right. That's how I know you are reading...or even seeing you saying the words, as you go along. Then I know your thinking about it and not just putting the letters down the spaces in between and then at the end making up the story. Proper writing is when you know what it says as you are going along.

A further example of her use of constitutive criteria was observed in a Mathematics lesson. The co-ordinator asked for ideas on how they could record their findings. She then used the pupils' methods for recording the data. In each of the four groups, a pupil suggested a type of recording method which the co-ordinator used for that group. Later, she admitted that sometimes their methods were not what she would have suggested and were in fact rather difficult to use because they involved sharing resources which took time. She felt, nevertheless, that it was important for them to think and use their own methods of recording data. While she said she did this to make them independent of her, she was at the same time initiating them into the processes used in Mathematics.

Co-ordinator: Has he managed to complete it? Can we make this on the number

line?

Pupil: We can circle the numbers that do. The ones that won't, we can fill in.

Co-ordinator: Shall we use that system that has just been invented by him? Work on numbers 1 – 10. If you don't know, ask your friend.

Here is another example that came from a group. The pupil was asked to explain how the recording method might work. The pupils were given opportunities to explain processes to the co-ordinator and also to the other pupils.

Co-ordinator: I want us to find a way of marking down which numbers will make two towers of the same height and the numbers that won't make two towers of the same height.

Pupil: Miss, we could circle the numbers and put an X on those that can't.

Co-ordinator: How would that work?

Pupil: You see this number line you find – you know that 10 and another number like 10 put a circle round it. So ten has done that so you put a circle round. The numbers like 3 you need another colour. Where's the three (*takes a black pen and puts an X on the three and nine*). You put a cross but you need another colour for the crosses.

Co-ordinator: Well explained.

In the next excerpt, the co-ordinator combined modeling, use of an exemplar, the explanation of the process of investigation with another "ask how" question.

Co-ordinator: What about 20? Can you guess the answer? (*She modeled it with the*



*unifix again*). How many will be in each tower?

Pupil : 10

Co-ordinator: You are perfectly right. How did you know? They are right. Could we test the other ones?

Pupil: Yes, Miss.

Co-ordinator: Why, then?

Pupil: eh. I don't want to do it.

Co-ordinator: No. Can we do it?

Pupil: Yes.

During the various teaching and assessment phases, this co-ordinator gave a lot of feedback. The first example could be regarded as specifying improvement. For example, at the end of each Mathematics group session, the co-ordinator went around to correct individually. What follows are some sample comments:

Co-ordinator: What number are you trying out?

Pupil: 10.

Co-ordinator: All right then, take out 10 unifix and show Sanita because you are working with her. (*Co-ordinator observed without talking*).

Co-ordinator: You ought to try out all the numbers. Start with 0 – no unifix. Then what?

**Another excerpt:**

Co-ordinator: Check that number 9 again before you copy it out. Now does it work?

Pupil: No.

Co-ordinator: Then change your pattern.

Pupil: I need something to change it.

Co-ordinator: (*Co-ordinator remained with the group*). Just copy it down.

The feedback indicated whether the pupils had done the work correctly but also whether they had completed the task using the correct process, i.e. working with their partner and adding a check-up phase to their work. Again, it was apparent that using the correct process was of equal importance to the co-ordinator as the correct answer. In summing up one lesson, the co-ordinator used one pupil's number line to explain the process again.

In the next example, the co-ordinator instructed through modeling the process, gave specific acknowledgement that the result was correct and also involved the pupil in the demonstration of the idea. Guided practice and praise was also given. The exchange took place in a small group setting of five pupils. They were working on the two towers task given to teach odd and even numbers.

Co-ordinator: I would like to hear from you (*pointing one particular pupil*). How many did I want? 2 – do you think it's possible?

Pupil: It might be possible. (*Co-ordinator watched while pupil tried it again*).

Pupil: No.

Co-ordinator: O.K. You need to break them up to start again.

Pupil: All right (*Took them apart*).



Co-ordinator: Just show me what two towers look like? Now what happens when you try to make 9 unifix into two towers?

Pupil: One is bigger.

Co-ordinator: So, it's not possible to make 9 into two equal towers. Let's try it with 3. Is it possible? Can you do it?

Pupil: You need another one.

Co-ordinator: Well done. Show us two towers of the same height. Who would like to show me what would this look like when you make two towers?

Pupil: One higher and one lower than the other.

Co-ordinator: Good boy.

In this example, the co-ordinator used her questions to lead the pupils through the task and the concept. The pupil hesitantly articulated the answer which was then explained again by the co-ordinator. This was the same process used by the co-ordinator in the other lesson. The pupil added their experience of the task and, in the telling, communicated their understanding and achievement to the co-ordinator. In this way, the co-ordinator's questions teased out pupil thinking, or even created it, and revealed understanding and achievement criteria to the co-ordinator and the learner.

Co-ordinator: What did you notice happening on the number line? Are you looking at it? You are not. Are you? What do you notice?

Pupil: There's a pattern.

Co-ordinator: How does the pattern work?

Pupil: Won't work.

Co-ordinator: But now that I have told you about odd and even, how would you call it?

Pupil: eh odd, even.

Co-ordinator: The number 12. Is it odd or even?

Pupil: Even

Co-ordinator: Of course.

One type of feedback not observed was the use of a pupil's previous work as a means of comparing present and past achievement. This type of dialogue requires the learner to identify specific features where improvement is required. Portfolios, considered a source of material upon which to base such discussions, were not used during the observation period except as a place to put finished work. Some pupils had only one or two pieces in the portfolio. The pupils did, however, have several other folders for their work. The use of the portfolio was, it seemed, restricted to summative assessments for reporting. In relation to assessment, the teacher also collected and recorded information on current achievement and conceptual understanding. It was not always used for feedback directly to the pupils.

Having looked at the purposes and conduct of classroom assessment, the remaining of this section examined what was assessed by the co-ordinator in the course of conducting classroom assessment. It also presented findings of any problems this co-



ordinator faced during assessment and how she coped with these. When describing what was assessed, it is interesting to start with the learning objectives pupils had to attain. It is worth mentioning that the content of assessments was officially pre-specified by the Ministry of Education and the Mauritius Examinations Syndicate. These competencies which the pupil had to demonstrate after the end of an instructional process and which had to be observable and in principle testable, were broken for each teaching unit that pupils had to achieve and are described in detail within the curricula and the teacher's manual (*Learning Competencies for All*, 1992).

Examples of learning competencies:

**English (*Essential Learning Competencies*):** Infer the meaning of important words in a passage.

**Mathematics (*Essential Learning Competencies*):** Interpret and draw line graphs.

**French (*Essential Learning Competencies*):** Ecrire un court texte narratif.

**Environmental Studies (*Essential Learning Competencies*):** Give reasons for taking a balanced diet.

It is obvious from the above that emphasis is placed on expressing the objectives in terms of detailed activity which is determined by the appropriate verb and the content.

What sort of objectives did the teachers assess? For assessment purposes, it was observed that the co-ordinator at this school was more concerned with the four core subjects. At no time was the co-ordinator found to be planning, teaching or assessing

non - core subjects like extra curricular activities. These findings were similar to those in the other three case study schools. The interest was on the four core subjects. This may be because these four core subjects are compulsory at the Certificate in Primary Education examinations.

Example:

- Write a composition with 2 or more paragraphs (English)
- Calculate the surface area of the cube (Mathematics)
- Faire une dictée de 35-50 mots (French)
- State how a volcano is formed (Environmental Sciences)

The Learning Competencies for All document (1992) contains Essential Learning Competencies and Desirable Learning Competencies. Sixty per cent of the competencies are ELCs while the remaining forty per cent are DLCs.

At this school the content of the learning competencies the co-ordinator was assessing could be generally classified as lower level objectives of Bloom's (1956) taxonomy. That is, the teachers were more concerned with knowledge and comprehension as the following examples show:

- Take part in school plays (Recall).
- Draw one right angle (Understanding).
- Ecrire un paragraphe pour raconter (Recall).
- State three simple functions of the skin (Recall).



Similar findings were noted at case study schools: St George and Elizabeth. This is surprising when case study school, St George is a high performing school. One explanation could be that the majority of the pupils passed the CPE examinations without being ranked.

There may be several hypothetical reasons for assessing lower level objectives. The first reason may be because these objectives were easy to assess. The second reason could be that the co-ordinator was aware of the strengths and weaknesses of her pupils and thirdly, because the co-ordinator believed that pupils should master the basics (Rowntree, 1977; Satterly, 1989; Airasian, 1994).

This co-ordinator was also observed to consider the pupil's own past progress as a point of reference and interpreted the evidence of the new work against it. A pupil was reported to be better or worse according to previous performance (Shipman, 1983; Satterly, 1989). To the co-ordinator, such procedures aimed to help individual pupils understand the difference between their present and past achievements, to check their weaknesses and to become aware of what they need to improve.

Example:

Co-ordinator: You have improved quite a lot since the last term.

Co-ordinator: This week's composition is much better than last week's.

Co-ordinator: You are getting better. Keep it up.

At the beginning of each assessment, this co-ordinator explained to her pupils the standards expected of them.

Example:

“A good piece of work is one that is neat”.

“There should not be repetitions”.

“No spelling mistakes”.

“Your ideas must be clear and must also follow”.

This co-ordinator was more interested in the outcome of her pupil’s work. She did not appear to seek for the ways the work was produced, that is, how the exercise was planned, worked and presented. It was observed that when she was examining the works of her pupils, she was looking at the end product. This meant that there were no opportunities for remediation. She argued that shortage of time and the size of her class and other responsibilities prevented her from spending more time with her pupils in their assessment exercises.

Not only was this co-ordinator observed to assess the product but also to devalue the efforts of the pupils, especially when she was marking Mathematics questions she had set. She checked the results of the problems and whenever she discovered them to be wrong, she considered everything to be wrong. According to her “*What is important is the final results.*”

The fact that this co-ordinator was found to assess the products of the pupils’ work



and to overlook the processes followed to achieve them is contrary to the principles of progressive pedagogy which focuses on processes rather than products (Jasman, 1987). This finding raised the question of what the teachers had to do and what they were observed to be doing. This co-ordinator seemed to be doing the opposite of what the official directives had proposed.

The Ministry of Education in collaboration with the Institute of Education has produced guidelines (Master Plan for Education, 1990; Learning Competencies, 1994) on the procedures for assessing pupils. The guidelines make it very clear that teachers have to walk around the classroom while pupils carry out their classwork and to observe the ways in which pupils complete their tasks. That is, to obtain insights into such processes so as to be able to provide immediate feedback, help and remedy to pupils. However, what was observed in the classrooms, was in contrast to the official guidelines. The co-ordinator was either sitting at her desk when pupils were working or standing in front of the class. When the pupils had completed their tasks, she just collected the exercise books at the end.

It was also noted that there was no provision made for the bright or less able pupils. The co-ordinator expected all her pupils to attain the same objectives regardless of their differences in ability (Gipps, 1990). There were several objectives which appeared to be very difficult for the less able pupils, whilst some of the objectives appeared to be very easy and unchallenging for the very able ones.

Example from two pupils:

*“Les exercices sont difficiles pour moi et les autres enfants dans ma classe”. (The exercises are difficult for me and the other pupils). “I like to do something which I can do”.*

*“These task are too easy for me. When I have completed the tasks, I wait for the other pupils. I get bored”.*

These findings are not surprising since all classes in Mauritian primary schools are of mixed ability groups at the same year-level and are confronted with the same body of material and are expected, in theory, to master the same learning objectives. This is what the Master Plan of Education (1990) proposed: provide equality of education to all pupils. However, this ignored the fact that pupils come from different socioeconomic backgrounds and have different individual abilities. Hence, they do not start their learning from the same starting point, that is, from the same level (Gipps, 1990).

These findings are similar to other report studies in primary education (Sharpe, 1992; Broadfoot et al., 1994) which showed that bright pupils felt bored having finished their tasks quickly and waiting for others to finish or slower pupils were finding it hard to complete their task by the set time.

How did this co-ordinator assess her teaching effectiveness? It was observed that she gauged success mainly by the proportion of pupils participating in activities. A routine approach observed was the co-ordinator’s constant attempt to gauge success



during her teaching by asking pupils if they were following the lessons. The reactions of the pupils were normally “yes” or “no” but this was checked by observing the pupils’ reactions, such as how bored or alert the pupils were and also on the number of hands raised and whether they were participating in the discussions.

Example:

*“When I see bored looks on my pupils’ faces and get no raised hands, I realised there are problems. I stop the lessons and repeat the main points. Sometimes I have a break and start again”.*

*“On other occasions, if they are not alert, I change to classwork activity”.*

This co-ordinator also assessed socio-affective behaviours. The term ‘socio-affective behaviours’ is used in this thesis to indicate processes that observed teachers were applying for gathering information and evaluating pupils which are not directly associated with pupils’ academic progress.

This co-ordinator was interested in qualities associated with social outcomes. Honesty, for example, was one of the aspects this co-ordinator appeared to gather information about and to develop in pupils. There was an instance when the co-ordinator congratulated in front of the class a boy who told the truth that he had not completed his homework because the previous afternoon he had been playing volleyball. On the contrary, the same co-ordinator strongly criticised another boy who said that he had forgotten his homework book. In these circumstances, the co-ordinator assessed these incidents against socially acceptable moral criteria, of being

honest and truthful. Then she brought both cases in front of the class to socialize others by following the good example and not telling lies.

The co-ordinator's assessments which often took place even before she observed and listened to what the pupils could do in the classroom, was another issue of interest. It was noted that she often attempted to foresee pupils' academic future using information regarding their background, external appearance and the way they spoke or walked.

It could be argued that the way this co-ordinator used and reflected on assessment results often depended on her expectations for certain pupils, based on a range of socioeconomic background information about pupils' personal characteristics and previous assessments. Such information often produced a pupil stereotype such as, 'bright', 'stupid' or 'slow', which, in turn, gradually led to the pupils adopting this label (Rowntree, 1977; Black & Broadfoot, 1982; Pollard, 1985; Satterly, 1989; Airasian, 1994). On the other hand, if assessment results from a given test, for instance, did not match her expectations, she tended to reject the results as something which happened by chance (Broadfoot, 1979). It is interesting to hear the co-ordinator's comment on a 'less able' pupil's writing:

*"The neatness and accuracy of Ram's piece of homework is very surprising. He is not that bright. He must have sought help from his friends."*



The comments of the same co-ordinator on a pupil who was identified as 'more able' were very different from the above.

*"Sheila, how come you have done this. This is not typical of you. Were you not well... what is the problem. I am very surprised. You are a clever girl."*

Here is another comment from the same co-ordinator on a pupil's essay:

*"This is really a good piece of work. This is expected. He is the son a Principal Education Officer. His parents are very keen and interested in his studies. They always come to the school to discuss his progress."*

In contrast, the same co-ordinator, looking at the work of another pupil commented:

*"Now look at this boy's work. See the difference. His father is unemployed. He is not bothered about his son's education and it shows."*

Three points emerge here. First, the co-ordinator assessed pupils' products in reference to previous progress. Second, she associated the pupils' progress with their family background and third, the parents' role in co-operating with the school. This co-ordinator argued that from the first minute she saw the pupils' appearance, from the way they behaved and from their accent, she could tell which of the pupils would do well at school and which would do badly.

In fact, this co-ordinator had many opportunities to pre-evaluate, in a sense, pupils before even seeing them. For instance, when consulting the documents that accompany pupils from the school's records, there was information about the pupils' families, socioeconomic background and parental occupations. In the case of the pupils who came from other schools, the records were usually accompanied with academic grades and behavioural profile recorded in their reports (Rowntree, 1977; Airasian, 1994).

Such reports were usual in the common room when, at the end of the school year and before the beginning of the new school year, teachers prepared for their teaching activities. This co-ordinator, commenting on a new pupil said "*I am confident about the future progress of the boy, Sandesh, because I had already taught his brother in earlier years and he was good*".

It is interesting that, even before the pupils have the opportunity to show their abilities, this co-ordinator was in a way predisposed for pupils' future progress (Broadfoot, 1979; Airasian, 1994).

## **6.5 Overview**

In the first section of the conclusions, an outline of the findings in this case study is given in response to the research questions on classroom assessment. In the second section, the findings from the observation of the co-ordinator are presented.



### **6.5.1 Responses of the Assessment Co-ordinator**

For the first research question, “why do you do classroom assessment?”. the assessment co-ordinator said she did it for four main reasons: to provide feedback to the pupils, to diagnose the pupils’ difficulties, to monitor the progress of pupils and to communicate information to the parents.

How did she conduct classroom assessment? She said she did it by observing closely pupils working and also by questioning the pupils at the end of a lesson to evaluate the instruction.

The third research question put to her was the content of classroom assessment. What did she assess? She said she assessed process and mastery of basics.

When the assessment co-ordinator was conducting classroom assessment, did she face any problems and if so, what measures did she take to resolve them? She faced two problems: difficulty in assessing several pupils simultaneously and lack of time to assess all the pupils. To resolve the two problems, she planned a series of tests to assess her pupils.

The co-ordinator was also asked about the use and influence of the Learning Competencies document. She said that her teaching methods had been influenced by

the use of the document and that she used it for planning her daily lessons in the core subjects.

The next section looks at the findings from observing the assessment co-ordinator. Did she do what she said she was doing?

### **6.5.2 Findings from Observing the Assessment Co-ordinator**

This co-ordinator used curriculum resources to plan units and topics. A whole school format has been implemented and long - term plans were handed in to be checked by the headteacher. The long-range plans were changed most often to provide more depth on an area rather than to cover the whole curriculum. When weekly plans were changed, then the changes were based on emergent criteria or what occurred in class. The co-ordinator's notes indicated constant changes of plan including the need for more time, resources and remediation. This gives an indication that the co-ordinator uses information about pupil learning to feed forward into planning.

The co-ordinator used talk to demonstrate criteria specific to learning. She demonstrated, explained and reinforced specific criteria for achievement. In open-ended tasks, pupils were involved in the development of criteria for achievement especially relating to learning processes. These processes included predicting, developing strategies, checking results and trying alternate strategies. Reflexivity was noted in the co-ordinator's talk, whereby the co-ordinator's own thinking and methods for approaching a problem or task were made explicit to the learners.



In Art, Science and language, she used pupil or other kinds of exemplars to deliver feedback identifying specific achievement and to mutually negotiate the way forward. She would repeat a demonstration or model or a method if it was necessary. The coordinator made use of adaptive strategies based on her teaching and assessing. She also used whole group teaching to review information and to learn about current learner understanding. Use of group work sessions occurring consecutively allowed her to improve her explanations, instructions, and choice of materials or tasks in order to scaffold learning more efficiently.

Assessment included the use of portfolios and pupil work samples. However, she did not reveal details of her tracking or observation notes to her pupils or discuss or make the portfolios selections with a pupil. She used these collections summatively for discussions with parents and for report writing.

Feedback was given to the learners, especially feedback for improvement and achievement. She did not use tests of any kind or give written feedback. She used daily assessment tick lists to indicate who had completed a task or worked at a centre. If a number of pupils did not finish a task, she formed a new group to give pupils more time and more explanation. In this way, some lessons were individualised. It also was noted that achievement and improvement feedback in this case study took place often in whole class sessions at the end of the sessions, rather than individually during work. A pupil's work was analysed and discussed with the whole class

involved. Individual feedback discussions were briefer and directed to correction and completion of the task.

Important or salient features of task were articulated by the co-ordinator at whole group discussions at the end of the work times, drawing together a number of criteria, strategies and evaluation processes in a way that the largest number of learners could benefit from them. The strategy may also reflect the time pressures felt by the co-ordinator who used group work daily and had three different activities happening at the same time. Maintaining the focus and on-task time during group sessions was managed by the movement of the co-ordinator.

This co-ordinator used anecdotal notes for tracking reading development. She kept a binder of these notes. She also used tick lists to indicate coverage of topics. Her daily planning notes were outlined before the class but were added to during the course of the day. These anecdotal notes suggested ideas for the next lesson or changes she had made to the lesson. In this way, some evidence indicated that assessment included information about learning and about her teaching. The co-ordinator reflected on the efficacy of her work and made changes she thought might be necessary to make the concepts of the work more accessible. She called this 'giving more clues'. Clues were often used in her lessons.

Questioning to scaffold learning and to gather information used to modify planning and teaching emerged as an important strategy used by the co-ordinator. More



specifically, questions which require the learner to articulate processes and problem-solving strategies gave her the most useful information. The clearest evidence of adaptive strategies based on teaching and assessing was found in the teacher's instruction of Mathematics and Science. This seemed surprising given that the coordinator said her expertise was primarily in reading and language. But the observation data indicated that she questioned her instruction and the materials she had chosen most obviously when she did not know the area of learning well. In other words, she was most reflective about the practice when she was unsure of her own knowledge.

In this case study, self-monitoring was evident throughout the teacher's practice but was most evident in Science. Notably, she was taking a Science course every week to improve her understanding and teaching skills in this area. It could be that this teacher had not developed tacit knowing about her Science and Mathematics practice and therefore noticed the learning responses acutely. Her reflections on her teaching made use of formative information and directed her planning and subsequent instruction. Although the Science curriculum was new and different, she did not become more reflective or more formative in her assessment. Instead she seemed to react to her lack of experience in Science by asking very closed content questions in a group session tightly controlled by the teacher. This teacher had already developed a shared notion of power with her pupils, which she did not change despite the fact that she was unsure of her teaching. She continued to use the instructional moves that characterised her approach. The Science lessons took longer and required more clues

that she had thought, resulting in her frustration and feelings of time pressure. However, the learning benefits to the pupils in the construction of knowledge were enhanced by her approach. They did find words to discuss the concept and they developed the knowledge mutually.

In summary, this teacher (a) exhibited a problem-solving approach to pupils' learning and to her own teaching, (b) manipulated her classroom organisation to collect information on pupils' learning. She used a variety of strategies necessitating a variety of teaching settings including whole - class lessons, small group sessions, individual observation periods and pupil - led feedback sessions, (c) used a variety of questions directed at articulating the processes behind her own thinking. She asked questions that required pupils to do the same. Questioning of this type occurred during the teaching and assessing phases of work and (d) made moves to develop a collegial relationship with her pupils.

The co-ordinator was concerned with the four core subjects: English, Environmental Sciences, French and Mathematics. She was observed to be assessing the lower level objectives of Bloom's (1956) taxonomy. There may be several hypothetical reasons for teaching and assessing lower level objectives: easy to assess, stress on the basics or awareness of the strengths and weaknesses of the pupils by the co-ordinator.

She considered the pupils' past progress as a point of reference and interpreted the evidence of the new work against it (ipsative assessment). She was more interested



in the outcome of her pupils' work and was observed to devalue the efforts of the pupils. She only checked the results of the problems and whenever she discovered them to be wrong, she considered everything to be wrong.

She gauged her teaching success by the number of pupils participating in the classroom activities. She also assessed honesty.

This co-ordinator's assessment often took place even before she observed and listened to what her pupils could do in the classroom. She foresaw pupils' academic future using information on their background, external appearance and the way they spoke or walked.

As for the problem faced by her during the conduct of classroom assessment, she said shortage of time, the size of the class and other responsibilities prevented her from spending more time with her pupils in their assessment exercises. Another problem was that she assessed her pupils in groups. This meant that she only learnt about the pupils who gave answers. The understanding of those who were not chosen, or those who did not volunteer, remained unknown.

## Chapter Seven: Summary and Conclusion

### 7.1 Introduction

The impetus behind this study into the processes of classroom assessment was the introduction of the Learning Competencies in Mauritian schools and assessment arrangements. Because it is an area where rapid changes are taking place in the education system, its potential to assist in teaching learning process, an interest to explore teachers' current knowledge and practice about assessment in Mauritian primary schools was generated to widen my own understanding of assessment.

This case study research project took place in 1997, within four schools in Mauritius, after primary teachers had worked with the Learning Competencies materials for four years. The research focus was narrowed to standards IV to VI teachers at the primary level. Semi-structured and observation data from all four schools provided information on the purposes of classroom assessment, how it was conducted, what was assessed, the problems encountered in the course of assessing and how these are resolved.

In the first stage of the research, semi-structured interview questions were developed and tested in a pilot for the study. Four schools were selected for the study. This was done to describe wider practices in four school settings and to understand the links between strategies involved in the planning, teaching and assessment phases of teacher work.



The initial review of literature took place in 1997. Contextual data from the school was collected through the use of semi-structured interviews and observation. The responses from these two methods were used to answer the research questions. The case study data was analysed qualitatively including the teacher thinking required by those strategies to uncover the ways that assessment strategies might be linked or integrated into planning, teaching and assessment.

## **7.2 Structure of the Chapter**

In the first section of this chapter, the findings relating to the classroom assessment practices across all four case study schools are summarised. The results respond to the research questions of the study. Each research question is followed by tables showing the cross study findings and a discussion of the results. The small number of respondents and a small sample precludes the interpretation of the results as statistically significant. However the results do indicate the understanding and opinions of classroom teachers working in four primary schools. In the second section of the chapter, results from observing the four assessment co-ordinators are presented.

The responses of the semi-structured interviews provide a more detailed look at the classroom assessment practices of all 35 teachers in the four case study schools.

### 7.3 Overall Results from the Interviews

For the first research question, ‘why do you do classroom assessment?’, eighty per cent of the teachers said they did it for providing feedback to their pupils, while 77.1% said the purpose was to monitor the progress of pupils. Seventy four per cent of the teachers said they did classroom assessment to provide feedback to themselves. Over sixty five percent mentioned motivating the pupils and providing remediation. Nearly twenty-three per cent of the teachers mentioned evaluating the lessons and communicating information to the parents. Nearly forty-six per cent of the teachers said they assess their pupils to diagnose their difficulties. The lowest percentage (17.1%) said they did it to stress the main concepts.

**Table 25: Purposes of Classroom Assessment (all four schools)**

Purposes of classroom assessment	Responses (N=35)	
	Number of Teachers*	(%**)
To provide feedback to the pupils	28	(80.0)
To diagnose pupils’ difficulties	16	(45.7)
To evaluate the lessons	8	(22.9)
To monitor the progress of pupils	27	(77.1)
To stress the main concepts	6	(17.1)
To communicate information to the parents	10	(28.6)
To provide feedback to the teacher	26	(74.3)
To motivate the pupils	23	(65.7)
To provide remediation	23	(65.7)

\* includes the response of the assessment co-ordinator

\*\*The percentages exceed one hundred since teachers could provide more than one answer.



**Table 26: Conduct of Classroom Assessment (all four schools)**

Classroom assessment practices	Responses (N=35)	
	Number of Teachers*	(%**)
Close observation of a pupil working	25	(71.4)
Questioning at the end of a lesson to evaluate the instruction	22	(62.9)
Questioning during instruction to check if pupils have understood	28	(80.0)
Homework	15	(42.9)
Workbooks	15	(42.9)
Comments	14	(40.0)
Tests	25	(71.4)
Correction of work	28	(80.0)

\* includes the response of the assessment co-ordinator

\*\*The percentages exceed one hundred since teachers could provide more than one answer.

How did they conduct classroom assessment? Eighty per cent of the teachers said they conduct classroom assessment by questioning the pupils during instruction to check if pupils have understood the lessons and to correct the work, while 71.4% said they closely observed their pupils at work and also did tests. Nearly sixty-three per cent of them mentioned questioning at the end of a lesson to evaluate the instruction. Homework and workbooks were mentioned by nearly forty-three per cent of the case study teachers.

The third research question put to the teachers was the content of classroom assessment. What did they assess? Ninety-four per cent of the teachers said they

assessed process while eighty per cent assessed product. Between fifty-four and sixty per cent said they assessed mastery of basics and social domain while between thirty-one and thirty-four per cent mentioned social domain and all round development.

**Table 27: What was Assessed (all four schools)**

What was assessed	Responses (N=35)	
	Number of Teachers*	(%**)
Process	33	(94.3)
Product	28	(80.0)
Mastery of the Basics	21	(60.0)
Affective Domain	19	(54.3)
Social Domain	12	(34.3)
All round development	11	(31.4)

\* includes the response of the assessment co-ordinator

\*\*The percentages exceed one hundred since teachers could provide more than one answer.

When the teachers were conducting classroom assessment, did they face any problems and if so, what measures did they take to resolve them? Over ninety per cent of the teachers said they faced two major problems: difficulty in assessing several pupils simultaneously and lack of time to assess all the pupils. Nearly sixty nine per cent of the teachers said that the implementation of their classroom assessment is hindered by the Ministry. Forty per cent of them mentioned disruptions and noises while twenty per cent said they face problems because of lack of formal training in assessment. To resolve these problems, they planned a series of tests and



give homework to their pupils.

**Table 28: Problems Faced by Teachers during Classroom Assessment (all four schools)**

Problems faced by teachers during assessment	Responses (N=35)	
	Number of Teachers*	(%**)
Lack of time to assess all the pupils	32	(91.4)
Lack of formal training	7	(20.0)
Difficulty in assessing several pupils simultaneously	33	(94.3)
Disruptions	14	(40.0)
Noises	14	(40.0)
Personal reasons	16	(45.7)
Ministry	24	(68.6)

\* includes the response of the assessment co-ordinator

\*\*The percentages exceed one hundred since teachers could provide more than one answer.

The teachers were also asked about the use and influence of the Learning Competencies document. All the teachers said that their teaching methods had been influenced by the use of the document. Over ninety-one per cent of the teachers said that they used the document for planning their daily lessons in the core subjects. Between sixty-nine and eighty per cent of the teachers said they use the document for deciding on the pupils' achievement while between sixty-nine and eighty-three per cent of teachers said they use the document to help diagnose the pupils' strengths and weaknesses.

**Table 29: Use and Influence of Learning Competencies Document (all four schools)**

Use and Influence of Learning Competencies Document (N=35)	English	EVS	French	Mathematics
	Teacher (%**)	Teacher (%**)	Teacher (%**)	Teacher (%**)
To plan my daily lessons	32 (91.4)	33 (94.3)	33 (94.3)	33 (94.3)
To decide on a child's achievement	28 (80.0)	24 (68.6)	25 (71.4)	26 (74.3)
To help diagnose a child's strengths and weaknesses	24 (68.6)	25 (71.4)	29 (82.9)	28 (80.0)
My teaching methods have been influenced by the use of the document	35 (100.0)	35 (100.0)	35 (100.0)	35 (100.0)

\*\*The percentages exceed one hundred since teachers could provide more than one answer.

## 7.4 Overall Results from the Observations

### 7.4.1 Planning Phase

The Learning Competencies document was used for long - term planning for all four case study teachers. The assessment co-ordinator of St George school said in interview that she used the document for daily planning a great deal and had the document on her desk, although there was no evidence of the use of the document in her daily plans nor did she consult them during the period of data collection. The assessment co-ordinator of Elizabeth school also stated she used the document a lot



for planning, except in English where she had the most expertise. However, she and the assessment co-ordinator of Manor school had planned topics, which referred to their long-term plans as guidance for their daily plans. At St Anne school, the assessment co-ordinator referred to the documents for her initial planning of a topic, keeping in mind the goals she was aiming to achieve. This co-ordinator had learned a great deal about the document from her teaching experience. While she did not consult the documents and said she used it only a little, she did not refer to her long term plans to help in her daily plans.

The first case study co-ordinator (St George school) did not update her planning in any way, other than indicating that more time was needed to complete the tasks. The second case study co-ordinator (Elizabeth school) provided examples which when analysed, indicated constant refinement planning. She planned topic work from the document and thus her weekly plans reflected competencies' criteria. The daily plans revealed that she changed materials, instructions, questions, groupings and tasks in small ways, which appeared to respond to criteria which emerged from her interactions with pupils during the task and her discussions with the pupils after the work session. At several points, she either called changes in instructions or materials or giving clues. Other changes included demonstrations or modeling processes. The third case study co-ordinator (Manor school) also provided some evidence of planning adaptation, but the fourth (St Anne school) showed very little.

### **7.4.2 Teaching Stage**

The second (Elizabeth school) and third (Manor school) case study co-ordinators demonstrated, explained and reinforced specific criteria for achievement. In open-ended tasks, pupils were involved in the development of criteria for achievement, especially relating to learning processes. These processes included predicting, developing strategies, checking results and trying alternate strategies. Both used small group investigations, followed by class discussions, where the first group explained to the whole class what they had done and what they had found out. The co-ordinator asked questions probing the thinking and processes used in the task. In this way, the co-ordinator picked up the problems in the task and could modify it before the next group tried it.

All of the case study co-ordinators exhibited the strategy of modeling and guided practice in their teaching. This may have been a function of the content and skills to be taught in standard IV programme, which includes work on handwriting, basic reading and computational skills, use of manipulative and other concrete materials. Lessons in these content areas may lend themselves readily to modeling and guided practice. Gauging how much guided practice and modeling were needed revealed the level of competence or independence a pupil had acquired in a skill. Examples from the case studies included holding a pupil's hand when making a letter and then observing the pupil make some of the same letters independently. This was followed by corrective feedback, more guided practice and sometimes talking through the attempt of the pupil to do it independently. Other examples included modeling the



use of letter sounds and patterns and putting in a finger between words during group story writing and with individuals at their desks.

In Language, Science and Art, two case study co-ordinators used pupils' exemplars as a means to articulate criteria and deliver feedback identifying specific achievement. It was interesting to note that two of the co-ordinators said they would never use expert exemplars to the pupils. One reason given was that showing such an example might hamper the pupil's creativity in some way and that the example might make the pupil discontented with his or her work. Both views suggest a "discovery learning" approach.

### **7.4.3 Assessment Phases**

#### **7.4.3.1 Purposes of Classroom Assessment**

In general, the findings of this study indicate that teachers did classroom assessment in order to provide feedback, review teaching methods and for diagnostics purposes. That is, the use of assessment information to promote learning appeared to be the primary broad intention of all the teachers. It seemed to come into being in different ways and the nature of their assessments was, on the whole, formative. Observations of the classrooms revealed that teachers were constantly assessing their pupils to see to what extent they had mastered and accumulated the prerequisite knowledge and skills.

## **Feedback to the Pupils**

All the teachers were noted to provide feedback to their pupils about their results and on where, what and how to improve their performance. This is a fundamental principle of child-centred pedagogy. However, the form of the feedback was by and large some brief comments. Pupils seem to receive this from verbal or non-verbal reactions to their behaviour, performance and work from their teachers. They want to know how their teachers respond to their contribution to the classroom discussion, participation and their attitudes during the lessons.

The types of feedback given varied from teacher to teacher. There was feedback where the pupils were essentially led through the process until an answer became clear. In this instance, the teacher did not go over the process or summarise it for the pupils. This may have helped the pupils generalise the process and thus be able to transfer the thinking to other similar situations.

There were examples of feedback implying punishment, approval and disapproval, and specifying appropriate behaviour and language. There were also examples of feedback on spelling and neatness, on criteria necessary for success, process, letter formation and whether work was done correctly, and also if the correct process was used.

## **Feedback to the Teacher**

Just as assessment may give the pupils feedback as to how well they are doing, so too



it may give the teacher feedback as to how well they have been teaching. This is how assessment contributes as to whether the learning objectives have been reached, about how well they had been taught, in order to plan their next teaching and adapt their lessons.

The findings indicate that teachers gained constant feedback from the pupils by observing their reactions, their body language, their participation and involvement in the lesson and by reading “the light in their eyes” as well as by listening to what they said.

In general, teachers were noted to repeat, rephrase and remediate to improve their teaching effectiveness. In addition, teachers used previous results to plan their instruction. These results provided information regarding the appropriateness of the teaching approach. Useful assessment information for a particular class or individual pupils were transmitted from the previous teachers to their successors as well.

### **Diagnosis**

The important purpose of classroom assessment to diagnose both formally and informally pupils’ learning levels, and also their emotional or social problems and teaching deficiencies, was mentioned by the case study teachers and also observed during fieldwork.

It seems that teachers are constantly on the lookout for pupils who are having

learning, emotional or social problems. These types of assessments appear to be the most common. Teachers try to identify these problems by observing their performance and behaviour, questioning the children or assigning various tasks and checking their work and then documenting their frequency in an attempt to measure whether and up to what extent they have learned the material and accordingly selecting remedial activities. In most cases, the teachers are able to diagnose the weaknesses and provide the necessary remedial activities needed, but there are times when the pupils are referred for specialized diagnosis and remediation which is done outside the classroom.

One of the most common and routine assessment activities, which is done at the beginning of each teaching session, is the 'testing' of the previous lessons taught either on the same day or on the previous day. In this way, teachers try to use it as a foundation for the new knowledge. Further, a necessary precondition is to assess pupils' present level of knowledge as far as the previous taught material is concerned. Teachers attempt in this way to diagnose whether their pupils have any gaps in their mastery of the previous material and skills needed; whether they are able to accept the new ones and whether they need any additional explanations or help, to make a success of the new topic. In other words, the whole process is a check for comprehension and diagnostic assessment.

### **Communicating Information to the Parents.**

Another purpose that was mentioned by an assessment co-ordinator for doing



assessment, was to communicate information to the parents. The information given to the parents was mostly to do with punishment. This is in line with other research findings (Stewart & White, 1976; Broadfoot, 1986; Rowntree, 1991; Airasian, 1996) which suggest that assessment has a communicative purpose. It informs the pupils of their achievements and also encourages learning if information is provided with clarity.

### **Initial Assessment**

Analysis of the data suggests that during the process of initial assessment, the teacher meets each pupil and tries to get to know them. This is what the first few days are like in the majority of the classrooms, as teachers try to observe and learn enough about their pupils to form them into a social group who will work closely and in collaboration and also that will permit classroom goals to be realised.

In some schools, the initial assessment process often starts before the pupils enter in the classrooms.

A number of sources is available to the teachers to help them in their initial task. These range from school records, teacher room comments, preclass information to performance of siblings and parental comments.

Some of these sources provide formal evidence, but much of the information is informal. In some cases, the classroom teacher does not even observe performance

directly but relies upon hearsay evidence from other sources. From all these sources, teachers glean information that helps them form some kind of impressions about their pupils' ability, interest and motivation, as well as about their family background.

Classroom observations revealed that teachers, often being unaware, attempted to control pupils' learning, knowledge, speech and behaviour by criticising undesirable and praising desirable performances and attitudes. Frequently, the teachers' interest focussed on pupils' qualities such as compliance, conformity and the like. Teachers attempted to maintain a smooth flow of instruction and they were constantly assessing and monitoring pupils' behaviour.

#### **7.4.3.2 What is Assessed in the Classrooms**

Typically, observed teachers appeared to assess learning competencies, process, product, teaching effectiveness and socio-affective behaviours. There is evidence that teachers assess both cognitive and noncognitive behaviours.

##### **Cognitive Behaviours**

This is the most commonly assessed behaviour domain in schools. Cognitive behaviours include a range of intellectual activities such as memorizing, interpreting, applying, problem solving, reasoning, analysing and judging. Virtually all the exercises that pupils do in the schools are intended to measure one or more of these cognitive activities. Most of the instruction that is provided to pupils is focused upon helping them attain cognitive mastery of some content or subject area. The focus was



always on the four core subjects which are examinable. None of the assessment co-ordinators did any assessment on the non-examinable subjects or competencies. This was contrary to the guidelines given by the Ministry which stipulated that examinable and non-examinable subjects or areas should be assessed.

The teachers are more concerned with knowledge, comprehension and sometimes application of knowledge. Very rarely, teachers are found to be assessing pupils' competence in analysis, synthesis and evaluation of cognitive information. Only one assessment co-ordinator was observed to be assessing higher level competencies. There may be two reasons for concentrating on the lower levels. First, because teachers believe that pupils have to master the basics and secondly, because it is easier to assess the lower level of objectives.

The results of the findings also indicate that teachers tended to 'underestimate' the value of pupils' efforts before the achievements of the final result. This is more evident when teachers are marking Mathematics problems they have set. They check only the results of the problems and whenever they discover them to be wrong, they consider the whole pupils' effort as wrong.

There are a few who look at the actual process the pupils follow up to the point where they have gone wrong. These teachers carefully consider the sequence of steps the pupils have followed and show the point at which the mistake is committed. This, however, is time consuming and the teacher usually works it out with the pupils

during the break. If many pupils fail in the same exercise, the teacher analyses and explains it for the whole class using the blackboard.

Most of the teachers ignore the guidelines on the conduct of assessment provided by the Ministry. Instead, they are seen sitting at their desks or standing in front of the class when pupils are working and just take the completed product at the end.

It was also observed that the teachers were interested in the outcome of a pupil's work. Less frequently they appeared to seek for the way it is produced, i.e. how the work is planned, approached, executed and presented. Several studies report similar findings because they are concrete and measurable (Satterly, 1989; Airasian, 1996).

No provision was made for the able or the less able. All the pupils were treated the same. The expectation for all the pupils to attain the same objectives regardless of their differences in ability was common in all the classes. Several of the objectives were noted to be unrealisable for the weak pupils, whilst they were excessively unchallenging for the able ones.

Because there was no provision for pupils' individual abilities and the material targeted the average pupil, often able pupils felt boredom having finished quickly their tasks and waiting for the majority of the class to finish or the slower pupils striving to finish their work on time.



The range of cognitive qualities which were assessed was broad and extended from the lower order mental skills, such as the recall of factual information, to the higher order of interpretation and synthesizing.

Teachers seek to gauge the extent to which their pupils have mastered the material taught so far by observing pupils' performance and work; by addressing various tasks to them, either those included in the textbook, or teacher-made ones; by constantly asking them a great variety of questions; by correcting the tasks and by modifying the instruction. However, the whole process lacks smoothness because of disruptions by the pupils.

The question of what is being assessed in the primary schools raises the issue of how effective is classroom teaching in Mauritian schools. In general, teachers argued that the extent of the success of this general outcome is indicated mainly by the proportion of pupils participating in activities or by the extent to which the pupils are demonstrably learning.

A routine approach, observed in nearly every classroom, was the teachers' constant attempt to gauge during their teaching whether their pupils have understood the lesson by asking them if they were following. Teachers very often appeared to assess their teaching by observing pupils' behaviour and 'reading' them.

## **Non-cognitive Behaviours**

Although few teachers were in a position to describe precisely the non-cognitive objectives, all teachers were found to assess them continuously on a daily basis. The qualities which they constantly assessed could be termed socio-affective behaviours.

Affective qualities were constantly assessed informally by all teachers who needed to know who can be trusted to work unsupervised and who cannot, who can maintain self - control when the teacher had to leave the classroom and who cannot, who needed to be encouraged to speak in class and who needed not be. On the basis of their observation and interactions with the pupils, teachers described their pupils' characteristics and predicted how well they will do in their studies and class.

Affective qualities refer to pupils' features which teachers appeared to bear in mind frequently to assist pupils' learning. Assessing pupils' affective qualities was not an easy task. This is because this particular quality is not easy to observe and describe. Despite the difficulties involved in observing and describing these qualities, teachers constantly assessed attributes such as interest, motivation, effort and so on.

In addition, most of the teachers were also interested in qualities associated with social outcomes. Honesty, for example, was one of the aspects some teachers appeared to gather information about and to develop in pupils.

Politeness, self-control, leadership and cooperation were also among the social



qualities pupils had to develop if they wished to be acceptable members of the classroom society.

It is interesting to note that teachers built up a stock of information about each pupil's affective and social qualities, based mainly on their informal observations of the daily interactions with the pupils. Anderson & Bachor (1973) and Pollard et al., (1994) report similar findings. It is also worth pointing out that teachers kept all this information in their heads, none was found to keep a written record of such pupils' qualities. They seemed to try to develop both pupils' ability and interest in the subject, to judge their social qualities and also to control them at the same time.

#### **7.4.3.3 Conduct of Classroom Assessment**

Assessment was conducted using a variety of techniques in the classrooms. These ranged from oral questioning, informal observations, to commenting on or marking pupils' performance and interaction with the teacher.

Analysis of the observational data suggests that questioning was mostly closed one. It involved seeking a specific answer from the pupils in response to questions. The questions often required the pupils to think of examples, although if the pupils were stuck, clues were given. These questionings also looked for a correct answer where a clue is given to the pupils to help them provide the answer being looked for. The answers looked for were those that conformed to the teachers' notion of what was correct.

Field work revealed that unstructured observation was the most widely used way for teachers to collect information about pupils' academic, social and behavioural characteristics. Continuous observation is reported as the main assessment evidence collection approach in primary schools.

Textbook tasks were the same for all the class and for the same age level. There was no provision for pupils with different abilities. Teachers were found to be sympathetic towards less able pupils.

Teachers interpreted the information they had collected with reference to three general standards: criterion-referenced, norm-referenced and self-referenced. Textbook tasks and questioning were used in classes against which pupils had to work, independent of the work of others. However, there was no provision of differentiated tasks according to pupils' individual abilities.

Sometimes observed teachers considered the pupil's own past progress as a point of reference and interpreted the evidence of the new work against it. A pupil was reported as better or worse than before. They aimed to help pupils understand the difference between their present and past achievements, to see their weaknesses, to encourage and finally to make them become aware of what they need to do to improve. This approach avoids competition between pupils.



#### **7.4.3.4 Constraints in the Conduct of Classroom Assessment**

Shortage of time was observed to be the main problem encountered by the school assessment co-ordinators. Another problem observed was to do with not having time to record the progress of each pupil. This resulted in the co-ordinators keeping all the information in their head.

Frequent assemblies and interruptions were also other constraints in conducting classroom assessment. In these instances, assessment co-ordinators tried to make sure that everyone had at least the experience and had the opportunity to discuss the basic questions about the concepts themselves.

To resolve the problem of shortage of time meant the continuation of assessment during the break or after school hours. If, however, the majority of the pupils did not complete their exercises, the problem was analysed and all the pupils were taught again. Other co-ordinators asked their pupils to do homework for the next day.

The size of the class and other responsibilities prevented another assessment co-ordinator to spend more time with the pupils in their assessment exercises. Another problem was that the assessment was conducted in groups. This meant that the assessment co-ordinator only learnt about the pupils who gave answers. The understanding of those who were not chosen or those who did not volunteer, remained unknown.

Finally, although the assessment co-ordinators kept some checklists noting whether or not a pupil had experienced an activity, no notes were made on whether or not the pupil understood it. The co-ordinator did not have any formal way of monitoring achievement or tracking it for use in future planning. However, the planning was done by the week but it was always subject to change if it was found that the pupils had not understood.

In the light of these findings, an interesting question emerges. What implications do these restrictions have on teaching and learning, and what can be done to improve the situation? Solution to the time question could include extension of teaching time, reducing the number of competencies to be assessed or providing the teachers with a bank of questions that are not time consuming to conduct.

### **7.5 Further Findings of the Study**

This section deals with the remaining study's questions and explains how the data relate to them.

- **Potentials of Assessment**

It is shown that assessment is an integral part of the interaction between teacher, pupils and the learning processes. Because of this close relationship, nearly all the teachers were not aware that what they were doing included some elements of assessment. They wanted to learn something extra which was formal and noticeable. They had the impression that assessment was a formal activity which was very separate from teaching. The study has indicated that assessment serves a number of



purposes, ranging from diagnosing strengths and weaknesses of pupils. providing feedback to the teachers and the pupils to communicating information to parents and pupils.

- **Importance of Assessment in the Classroom**

The study has indicated its importance by: (a) the fact that teachers used a wide variety of assessment practices and their indications that it serves many functions, (b) the frequent assessment reforms imposed by the Ministry, (c) the benefits and also damages it might cause to the teaching and learning processes, (d) its impacts on the pupils' achievements and failures and (e) the strong interest and demand from teachers for the training in assessment.

All these issues and the extensive literature that deals with them confirm the complexity and the importance of classroom assessment, its potential to assist learning and the necessity for teachers to be aware of this potential and the effective practices available.

In addition, international developments in assessments, such as the growing dominance of criterion-referenced approaches and more democratic, participatory assessment practices, appear to have convinced policy-makers in many countries of the potentially key role that assessment can play as part of the teaching-learning process itself.

- **Current Knowledge and Practice about Classroom Assessment**

From the observational data, it is shown that teachers were not typically very experienced in assessment, in how it can be effectively used and the techniques available. There could be many reasons to explain this. One is the inadequacy of training in assessment, while another could be that teachers usually focus on teaching activities rather than assessment. They see assessment most clearly in its summative form for accountability, selection and certification. It could also be due to lack of explicitly formulated objectives or the teachers not being aware of the objectives. Another reason could be the assumption that assessment issues are the job of others (officials from the Ministry). All these could be interesting topics for future research.

Overall, these findings reveal the inconsistent, intuitive and subjective approaches of information gathering used in Mauritian primary schools, which is criticised by research because they yield unreliable results.

- **Familiarity in the Conduct of Classroom Assessment**

The study has shown that the Ministry introduced the Continuous Comprehensive Evaluation scheme and the Learning Competencies without any due regard to how assessment was going to be implemented. Teachers, on the other hand, were not aware that assessment was part of their responsibilities. In fact, they did not realise what they were doing was assessment.

The fact that they asked for training in assessment indicates that they were not very



familiar and confident with the assessment practices. Despite not being familiar with assessment and not having the relevant training, it is shown that Mauritian teachers were managing to conduct classroom assessment by using several practices which ranged from questioning, observation, tests to homework. The findings also show that teachers were more concerned with cognitive domain which was mainly of lower order levels.

Finally, it is shown that learning competencies in the four core subjects are being taught in the schools and are also being assessed by the teachers.

### **7.6 Implications for Future Research**

There were several lessons to be learned from this study about carrying out research in a less industrialised country which is as big as London. In the context where there was, firstly, little tradition of research let alone, qualitative research, it was important that everyone concerned was fully informed as to what the purpose of research was. The fact that the researcher was working at one of the departments of the Ministry meant that communication among those in authority and those who were interviewed or observed was excellent as between policy-makers and practitioners. A lot of time was needed to explain to each person who participated, what the researcher was doing and what the research was for. It was also necessary to be constantly flexible and willing to be available at any time and in any place, if the required data was going to be collected.

Despite the issue of time and flexibility, the required data was collected, analysed and reported. The findings which are reported in this study are based on qualitative data and a sample of four schools. They are useful, therefore, as indicators which point in the direction for the conduct of further research. A number of questions have arisen based on the four case studies and questionnaire data:

1. The role of the head teacher in the development of assessment skills was examined. One of the heads was viewed as a colleague and mentor as well as an initiator of change. How consistent is this finding? How helpful are head teachers in assisting teachers in the conduct of assessment?
2. Training in assessment was rated as a very important influence on classroom assessment practice. Several questions arise from the findings. Is a component in assessment taught during teacher training? If not, why not especially when it forms part of the teaching and learning process and teachers have to conduct regular classroom assessment? Is assessment taught in pre-service training? What are the strengths and weaknesses of the current training? How could it be taught so that teachers might find it more beneficial to their daily practice?
3. The influence of colleagues and experience in the classroom were rated the most important influences on assessment practices. How might this understanding be used in school-based initiatives to develop classroom assessment skills in both experienced and inexperienced teachers? Also, how could in-service training be



improved to be a more efficacious method of developing classroom assessment skills? If the influence of colleagues is as important as has been noted in the four case studies, could change and development of new skills be increased if two teachers go on courses together as mentors for each other?

4. What is the importance of reflective teacher thinking in the development of classroom assessment skills? If a teacher's experience in the classroom is so powerful an influence on classroom assessment skills, can reflective thinking provide the motivation for change in practice?
5. The Learning Competencies document and workbooks were rated as a very low influence on classroom assessment practice. Considering that a great deal of money is spent on developing such materials, how could the materials be used and distributed more effectively?
6. Impact of classroom assessment practices on the pupils and the teachers. What are the problems encountered and their suggestions for improvements.
7. Questioning in the conduct of classroom assessment was stressed by the assessment co-ordinators. Which method is most effective in questioning? Also which is the best method for eliciting and providing feedback?
8. A survey of assessment practices in Mauritian primary schools. This will give an

indication as to what teachers are assessing, how they are doing assessment and what they are assessing.

9. It is noted that assessment is an integral part of the interaction between pupil, teacher and the learning materials. Because of this relationship, most teachers are not conscious that what they are doing includes assessment. They feel they need to add another, rather formal, task. Teachers think that assessment is a formal activity, separate from teaching. Considering the above, it will be of interest to find how teachers develop an awareness of tacit forms of assessment and enhance their effectiveness in the classroom activities.
10. The findings suggest that Mauritian teachers were sometimes not very clear about the objectives. If this is the case, what were they assessing and how?
11. Two of the assessment co-ordinators did not use the Learning Competencies document for their daily plans. It will be interesting to find out which document, if any, Mauritian teachers used for planning and teaching purposes.
12. Not all the assessment co-ordinators believed in the use of expert exemplars because these might hamper their pupils' creativity in some way or might make the pupils discontented with their works. It will be worth exploring the views of other teachers in the use of expert exemplars from the other Mauritian schools.



13. It will also be interesting to find out how teachers make sure that the assessments they conduct are valid and reliable. Further research could be on how the results are moderated, recorded and analysed.

## **7.7 Recommendations**

1. In the light of the present findings and the reviewed evidence, it seems that, first and foremost, teachers need training in assessment to become aware of the potentials of classroom assessment and to succeed in doing it effectively. Teachers need to be clear about why they are assessing and then to find the most appropriate ways to fulfil that purpose. Assessment components could be incorporated in the teacher-training course and also in the in-service training courses.
2. Teachers tend to see classroom assessment most clearly in its summative form for selection and certification. It should be pointed out that the value of classroom assessment is not only for selection and certification but also for a lot of reasons such as diagnosis, monitoring and improvement in teaching and learning.
3. In order to improve learning motivations, classroom approaches should involve differentiated tasks, clearly articulated criteria, challenging but achievable self-referenced goals and frequent collection of information on pupils' performance, and personal, encouraging and specific feedback.

4. Teachers need a variety of better devices in order to help their pupils to understand the reasons for their success or failure. There needs to be an improvement in the precision of assessment objectives so that pupils and teachers can understand and use them. In addition, research on classroom assessment implementation needs to articulate explicitly which of the multiple purposes can be realised by which combinations of practices.
5. The variety of learning objectives and practical restrictions that occur across age-levels and curricula indicate the necessity for substantially different assessment techniques. However, first and foremost, teachers must apply criteria of educational relevance.
6. In order to improve the quality of classroom assessment, teachers have to avoid prejudicial assessments, repeat observations, plan their assessments, bear in mind the learning context, think in advance about scoring criteria, assess what has been taught, keep written records and compare assessment evidence against other information.
7. The assessment procedure should include not only formal written work but oral and practical work also, and in some cases, personal qualities. Accordingly, assessment would become diagnostic and detailed, increasingly cumulative and integrated with the learning process. An alternative model in this perspective is the one referred to as 'Graded Assessment'.



8. An examination of the current practice and working out how it may be changed to become more efficient and manifestly more fair.
9. Provide training for teachers to apply assessments systematically, in particular for diagnostic and formative purposes and to improve their skills in observation and curriculum planning.
10. Teacher assessments should be trusted and their results reported so that teachers could teach and assess skills, knowledge and understanding in the way they consider relevant and appropriate for the particular pupils they are teaching. Account should be taken of the different situations in different schools, so that high achieving schools have the flexibility to make their own improvements if appropriate and low achieving schools are not unfairly penalised. This would require centralised prescriptions to be relaxed. Teachers could also use test and examination papers not just as performance indicators, but also as formative tools by looking at the qualitative nature of the pupils' performance. Teachers should also receive specific feedback from formal tests and examinations, which could help them improve teaching in particular areas.
11. More emphasis should be placed on assessing the stage of development relevant for the pupil, rather than determining in advance what pupils in a certain grade should know. Pupils who are below the norm in certain subjects should not

receive less teacher attention. This would mean stressing automatic promotion where possible.

12. Social skills should be taught and should not be secondary to formally assessed skills even when formal examinations are dominant. Within formally assessed skills, as broad a range of skills, knowledge and understanding should be assessed, as is possible with written tests.

13. Teachers and pupils recognise that individual learning could be improved qualitatively through the teachers' formative classroom assessment. To succeed, teachers must be shown that they have power to make improvements. This might be encouraged if schools and teachers are consulted about the nature of the curriculum and the external assessment. It is also important that teachers receive systematic positive as well as negative feedback about their classroom assessment as well as their examinations results.

14. Classes should be smaller so that more individualised and tailor-made assessments could be carried out, which would have more diagnostic value for pupils.

15. Pupils should be allowed to be assessed in their mother tongue as well as in other languages. This would enable a deeper-level understanding and allow for the application of skills, knowledge and understanding.



16. Pupils and teachers should be exposed to alternative types of assessment than written tests which could fulfil more formative roles. This would mean a commitment by the government to provide the resources and incentives for intensive training of all teachers, especially teachers who have no initial training. This will enable teachers to choose appropriate classroom assessment to assist individual learning.

## **7.8 Conclusion**

In order to interpret the findings of the present study, the reader has to recall the Mauritian education context (Chapter One) within which they were developed. In the light of the international changes in educational assessment, an attempt was made (during the period 1990-1992) to change the traditional Mauritian pedagogy to a progressive one by the introduction of two major reforms which included the introduction of Essential Learning Competencies and Desirable Learning Competencies, and also a scheme of Continuous Comprehensive Evaluation (Chapter One). However, these reforms were introduced without relevant teacher training and without any provision of practical help to the teachers (Master Plan in Education, 2000). All these, combined with their long experience of traditional teaching approaches, as well as the rather short period between the introduction of the reforms and the data collection of this study, could not fail to cause considerable confusion to the majority of the teachers. In general, the above data indicate that teachers' practices are oriented more towards the traditional pedagogy in terms of emphasis on

the lower level objectives, whole class teaching, focusing on the product as well as on the learning processes and objectives. Also, there is no provision made for the able or the less able. All the pupils are treated the same and are given the same tasks.

Almost a decade after the introduction and implementation of the Learning Competencies and the scheme for Continuous Comprehensive Evaluation, it is found that Mauritian primary teachers do not have the relevant training in assessment to fully apply the progressive reforms.

Despite the education system being very centralised, it seems that teachers assess their pupils independently and without any support from the government. They make little use of the workbooks, despite the huge amount of money spent on producing these. There is no monitoring, moderating or policing of the policies. Assessment practices are derived from their habit and ideology rather than from the official directives.

The inconsistency between belief and actual performance is a well-known phenomenon with teachers (Ashton, 1981; Brogden, 1983). Yet when it comes to implementing their own statements into practice, they fail to do so because their regular habits in the day-to-day teaching are stronger than their attitudes (Rogers, 1983).

Despite all these inconsistencies, classroom assessment is found to be very important



and has a lot of potential. This is indicated by the wide variety of assessment practices teachers are found to apply; the many functions they indicate that it serves; the benefits it might bring to teaching and learning and its impact on pupils' developments.

All these issues, and the extensive literature that deals with them, confirm the complexity and the importance of classroom assessment, its potential to assist learning and the necessity for teachers to be aware of this potential and the effective practices available.

In the course of exploring classroom assessment, to widen the researcher's understanding of the processes and its potential to assist learning, this study not only showed the importance and usefulness of assessments in the classrooms and teachers' current knowledge and practice about assessments in Mauritian primary schools but also attempted to provide answers to three main questions, namely, why do assessment, how it is conducted and what is assessed?

Since classroom assessment is a fundamental part of the teaching and learning process, it is hoped that the findings of this study would make an original and valuable contribution to knowledge and contribute to a better understanding of the complexity of the classroom assessment.

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**Appendix A: Questions for Semi-structured Interviews**

Semi-structured interview questions (Co-ordinator & Teachers)

Date..... School.....

Background information of School and Co-ordinator

Age:..... Teaching experience in years:.....

Number of staff:..... Number of Deputy headteachers:.....

Number of teachers (IV):.....(V):.....(VI):.....

Number of pupils:..... Languages spoken:.....

Socio-economic data:.....

Percentage pass in CPE Examinations (Last three years).....

Range of facilities:.....

Location of School:.....

Do you have a policy on assessment?.....

If yes, describe.....  
.....

Research questions: -

- *Why do you do classroom assessment? Do you want to make any comments on why you do classroom assessment?*

.....  
.....  
.....



- How do you do classroom assessment?

.....  
.....  
.....

- When you do assessment, what do you assess?

.....  
.....  
.....

- What are some of the problems you encounter in the course of doing assessment?

.....  
.....  
.....

- If you do face any problems, how do you resolve them?

.....  
.....  
.....

- If you use the Learning Competencies document, why do you use it?

.....

.....

.....

- Have your teaching methods been influenced by the use of the Learning Competencies document?

.....

.....

.....



## **Appendix B: Case Study – Manor School**

### **Introduction**

Manor school is a high performing school located in the rural areas. The school is a very small one with 350 pupils on the roll at the time of the data collection time. The pupils came from several socio-economic and ethnic backgrounds. According to the assessment co-ordinator, the school is very popular and the demand for places at the school is very high. Around 70% of its pupils are highly ranked at the CPE examinations every year. The head teacher is responsible for the school. He is assisted by three deputy head teachers (one for Oriental Languages) and 28 teachers. The school had an assessment policy that read *“assessment should be linked to planning and should enable teachers to match pupils’ needs”*. Related to planning is the issue of curriculum coverage by the class that was designed to show what had been taught, but did not indicate progress or achievement. To better plan for a pupil’s progress, the school policy also recommended a parent-teacher meeting for each pupil, to discuss the pupil’s learning needs and to discuss how the pupil may have settled into the new class. The policy also specifically outlined the school’s adoption of several assessment tools. Each core subject required a diary of observations to be used by the classroom teacher to make notes about the pupils’ progress, particular strengths and weaknesses, difficulties and concepts understood or not understood. Sampling pupils’ work was also highlighted in the policy, to be used especially for writing but for other subjects as well. Samples should be collected at least twice a year so that the teacher will be able to review the pupil’s progress and have evidence of that progress. The collections will be passed on to the next teacher. Pages from previous years will be joined together to give each pupil a

portfolio of his/her progress through the school.

This was the only school in the research study that outlined several specific assessment strategies in some detail in their assessment policy. The co-ordinator said in interview he had done much work on his own to find out about these strategies but said that he had experienced difficulty implementing these ideas within the school.

According to the Assessment Co-ordinator, Manor school was given very little effective in-service training on assessment and evaluation by the Ministry. The teachers at this school felt that they had to learn how to cope with the new curriculum and the reporting procedures on their own.

The assessment policy of the school indicated that teachers in the school were expected to include several important strategies and tools for conducting assessment within their classes. The co-ordinator was a full-time teacher, a fact which, in his view, greatly limited his time for teacher support. The real issue for him was implementation of the policy and helping teachers integrate strategies into their work. According to the Assessment Co-ordinator, this was not being done very effectively. He felt the head teacher had not provided the impetus necessary to motivate the teachers to try new practices.

There were eight teachers in standards IV, V and VI at this school. Standards V and VI had three teachers each, while standard IV had two teachers. One teacher from the eight teachers acted as the assessment co-ordinator. At interview, the



teachers were asked a series of questions on why they were doing assessment, on their assessment practices, what they were assessing and whether they faced any problems during this exercise and if so, how did they resolve them. There were further questions on the use of the Learning Competencies document for planning daily lessons, deciding on pupils' achievements, diagnosing pupils' strengths and weaknesses and whether their teaching methods have been influenced by the use of the Learning Competencies document.

Overall results are summarised in tables of frequencies. Percentage totals exceed one hundred in tables since multiple responses were possible.

After the interview, the assessment co-ordinator was observed. This was done to explain what the teacher believed to be her classroom assessment practices and the influences which have shaped her thinking and work. The observational data was used to confirm or question her self-report.

### **Results from the Interviews**

The literature review showed that assessment in the classroom is an integral part of the teaching and learning process. Teachers constantly assess every aspect of pupils' performance for various reasons (Broadfoot, 1979; Shipman, 1983; Stiggins, 1985; Satterly, 1989; Rowntree, 1991; Airasian, 1994; Pollard et al., 1994).

Data were collected by observing the assessment co-ordinator as part of the study to supplement the semi-structured interviews data and also to provide first - hand

evidence of the classroom assessment practices. Such evidence was not available from the interviews. These observational data might verify or dispute what teachers assert they do when they were interviewed. In other words, these data will indicate whether what they said they did was what they actually did during the assessment phases.

**Table B.1: Purposes of Classroom Assessment**

Purposes of classroom assessment	Responses (N=8)			All Teachers (%**)
	Std IV	Std V	Std VI	
To provide feedback to the pupil	2*	3	3	8 (100.0)
To diagnose pupils' difficulties	2*	3	3	8 (100.0)
To evaluate the lessons	0	1	0	1 (12.5)
To monitor the progress of pupils	0	3	3	6 (75.0)
To stress the main concepts	0	0	0	0 (00.0)
To communicate information to the parents	0	0	0	0 (00.0)
To provide feedback to the teacher	1	2	4	7 (87.5)
To motivate the pupils	1	1	3	6 (62.5)
To provide remediation	2*	2	2	6 (75.0)

\* includes the response of the assessment co-ordinator

\*\* Total percentages exceed one hundred since teachers could provide more than one answer.

Since classroom interactions and assessment activities are too complex phenomena, findings for this school, like the other three case studies, are presented in a rather summarised and organised manner. There will be several excerpts (short/long) from the observations to indicate why teachers were



assessing, how they conducted assessment and what they assessed.

It is hoped that this kind of presentation will enable the reader to have a clear understanding of the practices involved in these situations. But before presenting the observation data, results of the semi-structured data are presented in Tables B.1 to B.5 to get the views of all the teachers of Manor school.

Teachers were asked why they assess their pupils and the roles of assessment in aiding teaching and learning. The results are presented in Table B.1. All the teachers at this school said they did classroom assessment to provide feedback to the pupils and to diagnose pupils' difficulties. Six out of the eight teachers said the purpose was also to monitor the progress of pupils, provide remediation and to motivate the pupils. Seven out of eight teachers said they assess their pupils to get feedback to themselves. This was the only case study school where teachers did not mention the purpose was to stress the main concepts.

There were three main reasons for the assessment co-ordinator to assess her pupils: to provide feedback to the pupils, to diagnose pupils' difficulties and to provide remediation.

These are the comments of some teachers about the purposes of classroom assessment.

*"I attempt to diagnose whether my pupils have any gaps in their mastery of the previous material."*

*"I gather diagnostic information of a 'physical' nature and try to make appropriate decisions."*

*“The pupils want to know as soon as possible whether I have understood what they meant.”*

*“The raising or not of hands of my pupils in response to questions about something I have taught, give me an indication as to how well the instruction has gone.”*

*“I like to monitor the performance of each pupil.”*

**Table B.2: Conduct of Classroom Assessment**

Classroom assessment practices	Responses (N=8)			All Teachers (%**)
	Teachers Std IV	Std V	Std VI	
Close observation of a pupil working	2*	3	3	8 (100.0)
Questioning at the end of a lesson to evaluate the instruction	0	3	3	6 (75.0)
Questioning during instruction to check if pupils have understood	2*	3	3	8 (100.0)
Homework	0	2	3	5 (62.5)
Workbooks	0	2	3	5 (62.5)
Comments	0	0	3	3 (37.5)
Tests	2*	3	2	7 (87.5)
Correction of work	2*	3	3	8 (100.0)

\* includes the response of the assessment co-ordinator

\*\* Total percentages exceed one hundred since teachers could provide more than one answer.

In an attempt to draw a picture of how the respondents said they applied assessment in their day to day classroom practice, they were asked how they conducted their classroom assessment. All the teachers said they did it through three methods: close observation of a pupil working, questioning during instruction to check if pupils have understood and correction of work. Six out the



eight teachers also mentioned questioning at the end of a lesson to evaluate the instruction. Five teachers mentioned homework, while three teachers said their assessment practices were their own teaching comments. Nearly eighty-eight per cent of the teachers said they conduct assessment by testing.

As for the assessment co-ordinator, she said she conducted classroom assessment practices using four methods: close observation of a pupil working, questioning at the end of a lesson to evaluate the instruction, correction of work and testing.

**Table B.3: What was Assessed**

What was assessed	Responses (N=8)			All Teachers (% <sup>**</sup> )
	Std IV	Std V	Std VI	
Process	0	3	3	6 (75.0)
Product	1*	1	3	5 (62.5)
Mastery of the Basics	2*	0	0	2 (25.0)
Affective Domain	1	0	0	1 (12.5)
Social Domain	1	0	0	1 (12.5)
All round development	0	0	1	1 (12.5)

\*includes the response of the assessment co-ordinator

\*\* Total percentages exceed one hundred since teachers could provide more than one answer.

The teachers at this school were asked what they assessed during their assessment practices. A total of six teachers (all from standards V and VI) said they assessed process. All the three standard VI teachers said they also assessed product. Two teachers from standard IV said they assessed mastery of basics, while one standard IV teacher mentioned said either affective or social domain.

The assessment co-ordinator said she assessed mastery of basics and product.

What are the problems faced by the teachers of this school when they are conducting classroom assessment? Seven out of the eight teachers said lack of time to assess the pupils was a major problem. All the teachers mentioned difficulty in conducting assessment with several pupils. Disruptions and noises were mentioned by two out of the nine teachers. Two standard IV teachers said lack of training. A total number of six teachers said the Ministry was a problem in the implementation of the assessment.

**Table B.4: Problems Faced by Teachers during Assessment**

Problems faced by teachers during assessment	Responses (N=8)			All Teachers (%**)
	Std IV	Std V	Std VI	
Lack of time to assess all the pupils	1*	3	3	7 (87.5)
Lack of formal training	2 *	0	0	2 (25.0)
Difficulty in assessing several pupils simultaneously	2*	3	3	8 (100.0)
Disruptions	0	0	2	2 (25.0)
Noises	0	0	2	2 (25.0)
Personal reasons	1	1	2	4 (50.0)
Ministry	1	2	3	6 (75.0)

\* includes the response of the assessment co-ordinator

\*\* Total percentages exceed one hundred since teachers could provide more than one answer.

At this school, if teachers did not have enough time to assess their pupils, they said they assessed their pupils on the next day prior to the start of the lesson. Sometimes they shortened the length of the lessons. They also made sure that



pupils were given homework on the topics covered.

The assessment co-ordinator at this school was faced with three problems: lack of time, lack of formal training and difficulty in assessing several pupils simultaneously. How did she deal with these problems? She said she planned a series of tests on topics to assess her pupils.

She said she was disrupted because she had to attend meetings at short notices. She said *“The Ministry officers do not realise that I have to attend classes as well.”*

**Table B.5: Use and Influence of Learning Competencies Document**

Use and Influence of Learning Competencies Document (N=8)	English	EVS	French	Mathematics
	Teacher	Teacher	Teacher	Teacher
To plan my daily lessons	8*	8*	8*	8*
To decide on a child's achievement	6	7	5	6
To help diagnose a child's strengths and weaknesses	8*	6*	7*	5*
My teaching methods have been influenced by the use of the document	8*	8*	8*	8*

\* includes the response of the assessment co-ordinator

The teachers of Manor school were also asked about their use and influence of the Learning Competencies document in their everyday assessment activities in the four core subjects.

Not only did all the teachers use the Learning Competencies document to plan their daily lessons but also their teaching methods had been influenced by the use of the Learning Competencies document in each of the four core subjects. Between five and eight teachers used the document for diagnosing a pupil's strengths and weaknesses.

The assessment co-ordinator used the document for planning her daily lessons in the core subjects and for diagnostic purposes. She also said that her teaching methods have been influenced by the use of the document.



This section presented findings from the teachers' (including the assessment co-ordinator) semi-structured interviews. However, these findings have to be treated with caution, since they express what teachers said they do, not necessarily what they actually did in their respective classrooms. In order to cross-check the consistency of what they have said, the next section presents findings from actual observations in the classroom. This is to find out if what the assessment co-ordinator said she did was what she actually did.

The next section presents findings based on the researcher's field notes gathered during the three terms of field work from direct observations. It will be



interesting to see which classroom assessment practices the observed co-ordinator fulfilled when she was doing assessment.

### **Assessment Co-ordinator: Background**

The assessment co-ordinator was in her early forties at the time of data collection and had taught for ten years. Before working as a teacher, she had trained and worked as a Nurse in a general hospital. In general, she appeared to be a very quiet and soft-spoken person. It was noticed she did not volunteer answers readily. The pupils in the class often had great difficulty in hearing her voice. She appeared to be a very relaxed person. For example, when a new pupil who was shy, was brought unexpectedly in her class without warning, she simply laughed and said, "*One has to be prepared for any eventualities.*"

In her previous school, she had done assessment activities and tests. She expressed her opinion that pupils at this age "*should not be assessed.*" She said the results of the assessment did "*not tell her anything*" about the pupils' nor did she find the tasks very interesting. In interview, the co-ordinator said she used some materials from the Learning Competencies document and cited materials including some photographs relating to weather and geography. She said the only in-service training she had been given about the curriculum was by the Ministry of Education and Science. She said she had never received training on assessment at all. She reported that she liked to make her own "tick lists" to check what she has done. She said, "*I like to have little conversations with the pupils to see how they are getting on.*" In interview, she said that her assessment was generally on-going and she had little to do at the end of the year except fill in the boxes on the report

cards. She said she liked to listen to pupils' ideas and ask questions to clarify what they thought, but she did not like to change their ideas until they had done an activity. She said she wanted pupils "*to find out what they think*" and discussed it with others.

### **The Assessment Co-ordinator in Action**

The assessment co-ordinator used a sheet of paper to make notes for the weekly planning. The planning sheet listed subjects, competencies to be assessed, and a section to list assessment strategies and evaluation of results. For all the subject areas, the skills and knowledge sections taken from the curriculum were completed. The co-ordinator had left the recording and assessment sections almost blank, and the evaluation sections completely blank. With reference to these documents then, the curriculum was important in planning but not in the teacher's understanding of assessment and evaluation. This finding is confirmed by her statement that learning competencies are the backbone of what she taught.

On the weekly planning sheet, the activities for the core subjects were given more space, with room at the bottom for all the other curriculum areas. Only the activities were listed. No learning goals were listed, nor did they reveal any changes in plans based on how the work had proceeded in the class. There were no anecdotal notes of any kind written in the daily plans. This suggested that changes were not made as a result of classroom assessment strategies used in the class. The information noted from her planning sheets seemed at odds with her views expressed on the semi-structured interviews. The co-ordinator said her most important source of feedback into planning was her own records and ideas



from observing a pupil. From classroom observational data, it was seen that the co-ordinator completed a tick sheet noting names of pupils who had completed a specific task. She also made some lists with anecdotal notes on reading progress.

As was mentioned earlier, the co-ordinator had a very quiet voice and did not talk as often as the other case study co-ordinators. The transcripts reveal that the pupils at times responded to each other's comments and also in response to the co-ordinator's very brief questions or explanations. Perhaps because of this pattern, the pupils were not automatically directed towards "correct answers." Instead, the co-ordinator listened to their suggestions and explanations. While she did not write notes from the exchanges, it was clear that she did listen to the pupils and did so very intently. However, when she was asked what she had learned about the pupils' learning from a task or conversation, she made comments which included "*they don't have a clear idea yet*" or "*the pupils need more time to finish the work the next day*" or "*more need to be done*" with the concept. The comments seemed somewhat vague and may not have been representative of the reflections the co-ordinator made about the lesson. However, it was difficult to collect clear evidence that the co-ordinator adapted her lesson plans nor did she change her lessons very obviously. She said she kept mental notes of what needed more time and more tasks which she disclosed when questioned at the end of the lessons. In one follow-up interview, after a Mathematics lesson on money where the pupils had to pretend to buy sweets, the co-ordinator was asked the following questions:

- What concepts were you trying to cover?
- Who in the group was learning the concept easily and fast and well?

- What would be the next lesson for the group?
- How did you plan this task?
- What might you change about the task for the next group?

For the above questions, the co-ordinator gave the following answers:

- She said she was trying to teach number bonds to ten with a practical application of what they have to do in their workbooks. The task was also to introduce them to the idea of buying and selling and also planning to use the money.
- Two pupils understood the lessons very well but one pupil spent all his money on the first sweet so, though he could add, he had not stretched his money to buy the most number of sweets he could have. The co-ordinator said he got it the second time round. Another pupil did not understand about the pieces of money at all. She needed to do more explaining about the pieces of money before next time. She had to teach all the money first, which was not supposed to be part of the lesson. This pupil, said the co-ordinator, needed more practice in the next lesson. The others can start using two pence and five pence to spend and buy. She would not put them in different groups because they could help each other.
- She said she would just explain the pieces of money more clearly in the introduction next time.

These responses indicated that the co-ordinator was observing and assessing the pupil's individual progress. She did not note her ideas anywhere on her planning



notes or on anecdotal lists, nor did she appear to modify her instructions or her task in any way to improve her teaching in the next group.

She did spend time checking to see who in the next group knew the names and values of the coins. However, since she was interviewed prior to the next group's lesson, her adaptations may have been due to the researcher's presence.

In the teaching of vocal sounds, the co-ordinator asked two groups to make lists of "ch" words and draw small pictures of them beside the words. The co-ordinator sat for extended periods of about twenty minutes with each group. She did not talk a great deal but observed their work. She used prompts and questions to keep them going.

Co-ordinator: What's that Pierre?

Pupil: change.

Co-ordinator: ch change. Good. That's it.

Pupil: church.

Co-ordinator: That's very good.

Pupil: I know how to spell church.

Pupil: I don't think you can draw it.

Pupil: Christmas.

Pupil: No. that's cr.

Co-ordinator: No. it's ch- like Charles.

Pupil: Like chair.

Pupil: chilli.

Co-ordinator: green chilli

Pupil: no – cold and chilly.

Pupil: Chimley

Co-ordinator: That's chimney. (*Here the co-ordinator asked everyone in the group for an example.*) Put it in your own book. Don't worry about Leila. Now what have we got? Let's read the list. What are we going to write next?

The co-ordinator routinely asked and checked all their work. She used the task, observation and questioning to find out about the understanding of the group. There was no evidence this understanding fed into planning or future teaching. It must be noted that the noise level in the class made it difficult to hear because the co-ordinator did not circulate to the other areas of the room during the time with the vocal sounds. The other fifteen pupils were working on puzzles, handwriting and some books for thirty five minutes.

In Science, the co-ordinator began a unit on "Living and non Living Things" with a whole class lesson. It was her intention to find out what the pupils knew about living and non-living things by having them work on a list as a first task. She was able to gather good information concerning their conceptual understanding of living and non-living things through this method. She later worked on the skills of classifying and sorting. The co-ordinator said in interview that she did not like to tell her pupils the answers but rather to create situations where pupils discover the answers themselves. She added very little theory to class discussions. She spoke very little and did not correct the answers very often at this stage.



**Excerpt:**

Co-ordinator: To-day we are going to look at living and non-living things. We will list the main characteristics of living and non-living things. Living things exhibit the following seven characteristics.

*(This is the beginning of the lesson. She used "we" a lot. Expression of togetherness. She always nodded at a pupil to indicate he/she was to speak. She then listed the seven characteristics). Non-living things exhibit the following characteristics (She listed the characteristics.)*

Co-ordinator: Can we make a list of living and non-living things now? Let's look at living things first? *(She listed the living things as mentioned by the pupils).*

Pupil: Tiger.

Pupil: Dog.

Pupil: Cat.

Pupil: Horse *(several answers at the same time).*

*(She did not make any comment on the answers given. She wrote down on the blackboard in order they were given and did not follow up any of these comments. She also did not indicate in any way whether these answers were correct or not).*

Co-ordinator: Have we completed our list? Can we add some more on the list?

Pupil: Elephant.

Co-ordinator: How about rat? *(She wrote it down the list).* Now can you tell something the same about all these things? What are they all?

Pupils: Animals *(several shout at the answer).*

*(She did not give any feedback on the list that might be considered an evaluating comment, either approving or disapproving. She finished by asking another question. She worked on categorising the list. She questioned to solicit their*

*thinking but moved to wanting a correct answer).*

Now let's look at non-living things.

Pupil: Motor car

Co-ordinator: Is it living or non-living?

Pupil: living

Co-ordinator: Why is it living?

Pupil: It moves

Co-ordinator: Yes, but does it grow, does it reproduce?

Pupil: No

Co-ordinator: Then

Pupil: It's non-living

Co-ordinator: Very good

Pupil: Water

Co-ordinator: Is water living or non-living? Raise your hand if you think water is living? Why do you think water is living? *(Some raised their hands, others can't decide. The pupils indicated that water was vital for living. The co-ordinator asked an open question to gather information on their thinking).*

Pupil: It's there for the trees

Co-ordinator: If you know the answer, put your hand up. *(A few raised their hands).*

*(The co-ordinator decided to add another element to be considered, given that the pupils had not been able to conclude the characteristics of "living" and "non-living").*

Pupil: Because there are animals and they don't like water.

Co-ordinator: But we do.



*(She tried to probe the answer by teasing out some characteristics of living and non-living).*

Co-ordinator: But we need water to survive. Do you think the moon is living or non-living? That's it for now. We don't have time to continue. This is the end of the lesson. Could you do the homework on the living and non-living things for to-morrow. I will mark them then.

*(In the end, she concluded with the lesson but did not give any theory that could be applied to the other items. She asked the pupils to do some homework to be marked on the next day).*

In this excerpt, the co-ordinator used questioning to gain an understanding of the pupil's ideas. She followed up her initiations with questions or asked other pupils to respond to what had been said. The co-ordinator did not supplement the discussion with theory, nor did she often give feedback on the comments made by the pupils which might be considered an evaluation of their thinking.

After the interview, she said that she knew from the discussion that the pupils did not really understand the term "living" and "non-living" but had a few ideas as to what might contribute to it. After the session, she was asked, *"What did you learn about the pupils' thinking from making the living and non-living things list with them?"* She said that it was more difficult than she thought. *"You can see what and how they think. I don't give any answers then I wait until they have done more work"*. The co-ordinator asked almost everyone in the class for a suggestion for the list. In the second session, she also made use of the information she had learned the previous day in the concept of living and non-

living and the skills of classification. She relied on memory for this information but the information she had learned had been fed forward into the next day's discussion. There were well over twenty-five items on the list. The co-ordinator brought out the list a second day and began another whole class lesson by using choral reading to remember the list.

Co-ordinator: Let's get back to the trees. What do we have or live in the trees?

Pupil: Monkeys

Co-ordinator: Yes that's right. Let's put a few marks beside the ones we are not sure. *(Co-ordinator changed slightly her list-making procedure to include notations indicating items which might not be moving. This appeared to have helped the pupils focus).*

Pupil: Not sure about the moon.

Co-ordinator: Yes

Pupil: It follows wherever I go. There is sun also.

Pupil: It goes with me...Then it's alive.

*(Here the pupils started to question the list and raise questions. The co-ordinator listened to the pupils but did not break in during the comment. She did not interrupt the pupils even if the comments were irrelevant. She was not in control but joined in the conversation).*

Co-ordinator: We will have another talk about it later on in the day. At the moment we have a long list of living things. Let's read the list together. *(Everybody read the list).*

Co-ordinator: Some of the things we are not sure about like moon and sun. Because we are not sure, let's put them separately. *(She used "we". She*



*separated the items which might not be living from the others).*

Although the co-ordinator did not give any criteria for being alive, she said she felt they were getting 'closer'. She had begun sorting the list and let them continue to debate the characteristics of living. Through this technique, she created situations where pupils talked to each other in her presence. This method also appeared to create a sense of shared power in the classroom which enabled the pupils to tell about their ideas without feeling that they would be evaluated by the co-ordinator.

In Mathematics, the co-ordinator modeled an activity first before pupils at a group table tried it. The pupils were adding money to various amounts totaling fewer than 8. The co-ordinator said she learnt about it during an in-service training and has frequently used it. She said she had not changed it over the years. What the pupils had to do was to find three ways of adding up to that number. The co-ordinator demonstrated once and then gave money to the four pupils at the table. She gave them all the same amount. The rest of the pupils were working on something else. What follows is an example of guided practice and questioning.

Co-ordinator: Tell me. What coins do we need to make 8? *(She picks a 5 pence coin to start with).*

Pupil: *(They look at the coins and pick a 5 pence coin, then a 2 pence coin and another 2 pence coin).*

Co-ordinator: Well done. It's very easy. Is it not?

Pupil: It's easy. I can do it as well.

Here the co-ordinator repeated the task instructions often. She used the term "we"

when approaching a task to enhance the collaborative approach to learning. She also named the concept or skill being learned. In this example, she told the pupils that she had tried adding three numbers.

In another example, the co-ordinator used questioning and modeling to gather information on the concept of money. The pupils were using coins to add up to fifteen and then used the coins to buy the most sweets possible. There were different types of sweets on the table with different prices labeled. Then the co-ordinator introduced the concept of money and buying.

Co-ordinator: We are going to talk about money. *(She handed each pupil a 5 pence coin)*. Can you find a 2 pence coin?

Pupil: A 5 pence coin?

Co-ordinator: I have already given you a 5 pence coin. Look for a 5 penny coin.

Pupil: I have found lots of 2 pence coins.

Co-ordinator: *(referring to the pupil searching for a 2 penny coin)*. Can you find one? *(Girl found one)*. Can you find one that's silver? *(The girl picked a 5 pence coin)*. Is it a 5 pence coin?

Pupil: Yes.

Co-ordinator: What is the colour of a 5 pence piece?

Pupil: Silver. *(The co-ordinator checked that everyone had the five pence coin and also listening. She decided to go over all the money and the values)*.

Here the co-ordinator focussed on the one pupil having difficulty and added a lesson about the values of the coins after her questions revealed that the concept was not clearly understood.



In Science, the pupils develop their topic of living things into a project on animals. They were looking through books to find information and pictures on their chosen animal and putting it together in a small book of their own. The co-ordinator had given them several questions to answer including where the animal lived and what they liked to eat. She did not write the instructions down on the board but repeated them often. The exercise was challenging to many pupils because not all the information books were at their level. The pupils had to use picture cues a great deal. The co-ordinator used no exemplars or modeling of the assignment to convey the criteria for achievement. She repeated the instructions to the whole class and then to individuals.

When reading alone with a pupil, the co-ordinator gave the pupil feedback indicating the criteria required for achievement.

Co-ordinator: You are coming along very well. You sounded out really well. *(The co-ordinator gave specific praise to the pupil articulating in some way the skills in sounding out which contributed to the success. During writing practice, a pupil's paper kept slipping off the desk).*

Co-ordinator: You must hold the paper at the same time. *(She showed him how to do it).*

Here the co-ordinator was correcting errors but also giving specific suggestions for improving his writing.

In the next example, the co-ordinator provided criteria for the work to be successful. She also modeled how to find the answer. Later in the passage, she

corrected errors.

Co-ordinator: *(Looked at the work).* Very good. What does the rabbit eat? Can you find out what it eats?

Pupil: No

Co-ordinator: Find out from the books what rabbits eat. *(The co-ordinator put her finger under the words to find the rabbit eat. Then she gave the book to the pupil. Pupil came back after a few minute for clarification).*

Pupil: But I know.

Co-ordinator: No you don't know. Look here *(pointed to the page).*

Pupil: It eats carrot.

On several occasions, the co-ordinator would just watch the pupil at work and then go and get some counters or a manipulative material, put it at the pupils' table to use, point to a few incorrect answers and then smiled.

In the example that follows, the co-ordinator provided feedback by helping the pupils to articulate a problem.

Co-ordinator: Are you having any problem?

Pupil: Yes.

Co-ordinator: What's your problem, then?

Pupil: That lion doesn't fit there. They are too big.

Co-ordinator: Try this one.

Pupil: It does not work.

Co-ordinator: Don't worry. Just have a go.

*(Co-ordinator sat down to help the pupil. She gathered all the lions and systematically tried each one in various positions. The co-ordinator handed the*



*lions to the pupil to try. Pupil tried all of them).*

Co-ordinator: Have you tried all of them? *(She handed a very small one. The pupil tries to fit them together).* Show me how you try it. Just show me a nice picture of a lion.

This co-ordinator used several of the methods seen in other schools to create opportunities for gathering assessment information. She asked a group to explain and discuss their work to the whole class on several occasions. However, she did not ask each pupil to explain a part of the work, nor did she use the situation to give the pupils improvement feedback as to what could be done next, or how they might improve the work. Her questioning techniques were very different from the other case study co-ordinators. She waited or directed the pupils' response to her question to another pupil for comment. She gave the other pupils a chance to ask questions of her, but her methods did not always include evaluating feedback. Her listening skills tipped the balance of discourse away from teacher-talk to a more equal balance of talk between teacher and pupils. This was also different from any of the other case study teachers. It should be noted that her pattern of discourse required a slower pace in the classroom and more time for each lesson than was observed in the other case study classrooms.

Although this co-ordinator collected samples of pupils' work through projects, portfolios and workbooks, there was not a great deal of evidence to show that she used these materials to communicate achievements to the pupils. On her planning sheets for the term, it was important to note that, for the previous term, the recording and assessment areas were only partially completed. The co-ordinator

listed the collections of work found in topic folders, class books and booklets as her major sources of assessment information. In Mathematics she also listed verbal and display as assessment strategies but there was no elaboration as to what might be or what specifically she found out. The evaluation section which was put there, according to the assessment co-ordinator, to indicate whether the pupils have accomplished their learning or not, was not completed at all. Whether she did not feel it a priority to complete these records or did not know what to fill in, is not clear.

The co-ordinator kept anecdotal notes on reading progress. She listed the date, book read and some brief notes on the strategies employed by the pupil to read the text. Some examples included “good”, “repetitive words” and “used phonics well”. She kept the pages in a binder, which she used during book time after lunch time. At times, she commented on the pupil’s opinion about the book. The notes were not used to give feedback to the pupils. However, the co-ordinator did make general positive comments to them at the end of the reading. The co-ordinator relied on the Mathematics workbooks and the Science projects for data on current achievement in Mathematics and Science.

This co-ordinator said at interview that she did not believe in formal tests or assessment for primary pupils. She used a variety of performance tasks in her class and spent time observing pupils as they worked. She allowed work periods of up to one hour or more several times a week in order to provide time for more in-depth work and work completion. Her classroom assessment of the pupils’ processes, concepts and skills appeared to take place most often through these



observation periods.

The co-ordinator was noted to give homework on a regular basis. The usual work was reading several passages and answering questions, writing compositions or mathematical calculations.

Example:

Co-ordinator: For homework, read page 14 of the workbook and answer questions 1 to 10.

Co-ordinator: For to-morrow, do exercise 25 to 45 in the Mathematics workbook.

Co-ordinator: For the weekend, write a short composition of what you have done. Write about ten to fifteen lines.

For the co-ordinator, *“Homework is necessary for my pupils. It gives them practice on what have been taught. It is also important for consolidation of learning. When the sessions are short and you have about thirty pupils, it's not easy to assess the pupils.”*

It was noted earlier that this co-ordinator gave feedback to her pupils. She was also observed to use assessment for diagnosis purposes.

The co-ordinator diagnosed her pupils' psychological problems and then tried to help treat these accordingly. In one instance, the co-ordinator applied diagnostic assessment when she noted a boy who was too shy to participate in a class discussion and who avoided playing with others in the schoolyard. During the physical education class, the pupil was placed into a team to help him socialize

with his fellow peers.

There was another instance when all the pupils were shouting to give answers to a question put by the co-ordinator. This was interpreted by the co-ordinator as a situation where her pupils had to learn how to discuss in the classroom's social setting. This led the co-ordinator to organise a session to teach them to speak one at a time and not simultaneously.

Having looked at the purposes and conduct of classroom assessment, remaining of this section examines what was assessed by the co-ordinator in the course of conducting classroom assessment. It also presents findings of any problems this co-ordinator faced during assessment and how she coped with these. When describing what was assessed, it is interesting to start with the learning objectives pupils had to attain. It is worth mentioning that the content of assessments was officially pre-specified by the Ministry of Education and the Mauritius Examinations Syndicate. These competencies, which the pupil had to demonstrate after the end of an instructional process and which had to be observable and in principle testable, were broken for each teaching unit that pupils had to achieve and are described in detail within the curricula and the teacher's manual (Learning Competencies for All, 1992).

Examples of learning competencies:

**English (*Essential Learning Competencies*):** Pass a value judgement.

**Mathematics (*Essential Learning Competencies*):** Interpret a pictogram.

**French (*Essential Learning Competencies*):** Allonger ou raccourcir une phrase.

**Environmental Studies (*Essential Learning Competencies*):** Interpret a rainfall



histogram.

It is obvious from the above that emphasis is placed on expressing the objectives in terms of detailed activity which is determined by the appropriate verb and the content. At no time was the co-ordinator found to be planning, teaching or assessing non - core subjects like extra curricular activities. These findings were similar to those in the other three case study schools. The interest was on the four core subjects. This may be because these four core subjects are compulsory at the Certificate in Primary Education examinations.

What sort of objectives did the teachers assess? For assessment purposes, it was observed that the co-ordinator at this school was more concerned with the four core subjects.

Example:

- Locate key words in a passage (English)
- Relate international time to GMT (Mathematics)
- Ponctuer une phrase en utilisant la virgule (French)
- List common uses of water (Environmental Sciences)

The Learning Competencies for All document (1992) contains Essential Learning Competencies and Desirable Learning Competencies. Sixty per cent of the competencies are ELCs while the remaining forty per cent are DLCs.

At this school, the content of the learning competencies the co-ordinator was assessing could be generally classified as lower and higher level objectives of

Bloom's (1956) taxonomy. That is, the teachers were assessing objectives which were concerned with knowledge, comprehension, interpretation, analysis and judgement as the following examples show:

- Infer the meaning of important words in a passage (Higher level).
- Interpret a pie chart (Higher level).
- Ecrire lisiblement en formant bien les lettres (Lower level).
- Locate and name districts on a map of Mauritius (Lower level).

This was the only case study school where ELCs and DLCs were being assessed. This is not surprising, since 70% of its pupils are ranked highly in the CPE examinations.

There may be several hypothetical reasons for assessing a mixture of higher and lower level objectives. The first reason may be because the lower objectives were easy to assess. The second reason could be that the co-ordinator was aware of the strengths and weaknesses of her pupils and thirdly, because the co-ordinator believed that pupils should master the basics (Rowntree, 1977; Satterly, 1989; Airasian, 1994).

This co-ordinator also assessed socio-affective behaviours. The term 'socio-affective behaviours' is used in this thesis to indicate processes that observed teachers were applying for gathering information and evaluating pupils which are not directly associated with pupils' academic progress.

Praising pupils' efforts was very common in the observed classes. This co-



ordinator tended to seriously appreciate a pupil's attempts to learn and to work towards the demands of the subject. Regarding weak pupils in particular, she was observed to be more lenient and to place more value on their effort than on those of the pupils regarded as intelligent. This is what she commented in a weak pupil's Arithmetic tasks:

*"I am very pleased because you have tried to complete all the exercises, Reema. I have given you a few extra marks because of the efforts you have put in. Let's hope you try even harder."*

In another instance, the co-ordinator seemed to exert sharp criticism in a few cases where able but lazy pupils failed to attempt to improve their attainments. This is the comment in the copybook of an able but lazy pupil:

*"You can do better than this. You must try harder. What you have produced is not up to your standard"*.

These comments point out first, the self-referenced assessments and second that the co-ordinator considered pupils' efforts as well. In another case, a nine-year-old boy of standard five was trying very hard everyday to write his spelling correctly. Bit by bit he improved his performance dramatically, in terms of his abilities. Eventually, after a few days, the co-ordinator asked him to write the day's spellings on the board and when he succeeded the co-ordinator praised him in front of the class and offered him a coin to buy sweets. When next week the researcher revisited that class, the co-ordinator told him that the particular pupil was still continuing to put in a lot of effort and was progressing at a much higher

level.

This example indicates the role of extrinsic motivation which, for this young age, seems to work effectively (Satterly, 1989; Child, 1993).

This co-ordinator made it clear the rules and regulations of the school and the class to her pupils. She said she made such statements from the first day the pupils come to school. It was also observed that this co-ordinator had a notice-board displaying in large bold letters a list of do's and don'ts of the class and the school.

At this school, she was observed to be keeping the teaching flowing without long and frequent interruptions. She strived to maintain a smooth flow of instruction and she was constantly assessing and at the same time monitoring pupils' behaviour, as the following examples show:

*“Hands up if you want to speak”*

*“Can you all pay attention, please”*

*“There is a test going on in the next class. Can you leave quietly without making any noise”.*

*“What did I just say?”.*

This co-ordinator also told the pupils about the criteria expected of good work. In one instance, she told her pupils that the composition to be classified as very good should be neat, the handwriting legible and the ideas original.



## **Overview**

In the first section of the conclusions, an outline of the findings in this case study is given in response to the research questions on classroom assessment. In the second section, the findings from the observation of the co-ordinator are presented.

## **Responses of the Assessment Co-ordinator**

For the first research question “why do you do classroom assessment?”, the assessment co-ordinator said she did it for two main reasons: to provide feedback to the pupils and to diagnose the pupils’ difficulties.

How did she conduct classroom assessment? She said she did it by observing closely pupils’ working and also by questioning the pupils at the end of a lesson to evaluate the instruction.

The third research question put to her was the content of classroom assessment.

What did she assess? She said she assessed product and mastery of basics.

When the assessment co-ordinator was conducting classroom assessment, did she face any problems and, if so, what measures did she take to resolve them? She faced two problems: difficulty in assessing several pupils simultaneously and lack of time to assess all the pupils. To resolve the two problems, she planned a series of tests on topics to assess her pupils.

The co-ordinator was also asked about the use and influence of the Learning

Competencies document. She said that her teaching methods had been influenced by the use of the document and that she used it for planning her daily lessons and for diagnosing a pupil's strengths and weaknesses.

The next section looks at the findings from observing the assessment co-ordinator. Did she do what she said she was doing?

### **Summary of Observations of Co-ordinator.**

The co-ordinator felt the curriculum was moderately important to her planning but did not develop new tasks or assignments to co-ordinate with the curriculum requirements. Little evidence of adaptive strategies was observed, other than giving pupils more time for completing work and discussion.

It was evident in the pupils' ability to articulate criteria for excellence that the co-ordinator used talk to demonstrate criteria specific to learning. However, her verbal interactions were fewer and followed a different pattern than all other case study co-ordinators. Normally, teachers ask questions, pupils reply and then the pupils' responses are followed by the teacher again. In this instance, pupils responded to other pupils' comments. These initiatives were very welcomed by the co-ordinator in small group and whole - class lessons.

In this case study, the co-ordinator was an astute listener and observer. This provided the co-ordinator with a powerful assessment tool if she had been able to use her reflections about what she had observed to adapt her teaching and planning in response to it. The class discussions gave her good information on



their conceptual understanding because she was able to facilitate talk between pupils. It was evident that the co-ordinator made some use of modeling and guided practice, especially in teaching handwriting. It was also used in working with Mathematics, especially in using manipulatives for computations and problem solving. She made little use of exemplars. At times, she showed a pupil's work to the class but she said in interview that she would never make her own product as an example for others to follow.

The co-ordinator used workbooks as samples of pupils' achievement and as clues to the processes used to complete the work. Portfolios were not used for assessment purposes. The co-ordinator used portfolios only for summative purposes, despite a clear description in the school assessment policy of how portfolios could be used to encourage the pupils to self-evaluate their work and understand the criteria for achievement better. The co-ordinator used feedback to correct errors and specify achievement. Individually she gave feedback to pupils relating to the use of criteria for work or processes. There was, however, no evidence of feedback which connects new ideas to ones previously experienced, as seen in the practice of the school B co-ordinator. However, connections between ideas were made by pupils. This was possible because the co-ordinator's quiet manner and listening skills encouraged the pupils to react to others comments. The co-ordinator did not make use of standardised or performance assessments integrated into topics and teaching. She conducted informal observations but did not use anecdotal notes to support her ideas. The co-ordinator did make notes on reading progress but did not communicate the feedback to the pupils at the time.

Apart from providing feedback to her pupils, this co-ordinator conducted assessment to diagnose her pupils' psychological problems.

At this school, the co-ordinator was concerned with the four core subjects: English, Environmental Sciences, French and Mathematics. She was observed to be assessing the higher and lower level objectives of Bloom's (1956) taxonomy. There may be several hypothetical reasons for teaching and assessing lower level objectives: easy to assess, stress on the basics or awareness of the strengths and weaknesses of the pupils by the co-ordinator.

Socio-affective behaviours were also assessed by this co-ordinator. She was concerned about the efforts the pupils were putting in. She appeared to be lenient towards the weak pupils but exerted sharp criticism to able but lazy pupils who failed to attempt to improve their attainments.

Not only did she make clear the rules and regulations of the school and the class but also made sure that the teaching was kept flowing without long and frequent interruptions.

The only problem this co-ordinator faced during assessment was not having sufficient time to assess her pupils. During the living and non-living things session, she asked her pupils to do homework for the next day.