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**A Study of the Assessment Practices of Grade 1 Teachers
in an Urban Area of Jamaica**

by

Donna Chin Fatt ©

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment
of the requirements for the degree of Doctor of Philosophy

Department of Elementary Education

Edmonton, Alberta

Fall 2001

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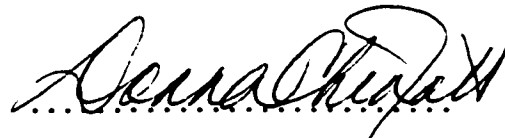
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April 24, 2001

University of Alberta

Faculty of Graduate Studies and Research

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled **A Study of the Assessment Practices of Grade 1 Teachers in an Urban Area of Jamaica** submitted by Donna Chin Fatt in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

Dr. Sylvia Chard, Supervisor

Dr. W. Todd Rogers

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April 18, 2001

This thesis is dedicated to:

Sr. Teresita-Marie De Souza OSF
Mrs. Silma Edwards
Mrs. Joy Grant-Carter
Mrs. Beulah Johnson
Mrs. Myrtle Kellier
Sr. Mary Bernadette Little, RSM
Mrs. Isla Vickers
Educators who have touched my life . . . and the lives of so many others.

Abstract

The purpose of this study was to develop an understanding of how Jamaican Grade 1 teachers, specifically those in the large urban area of Kingston and St. Andrew, assess their pupils. The complementary combination of quantitative and qualitative research methods was used for breadth of coverage of first-grade teachers and in-depth, balanced understandings and outcomes (Goodwin & Goodwin, 1996) of these teachers' assessment practices. A two-stage sample design was used whereby a questionnaire was first administered to 140 Grade 1 teachers from 61 schools (selected from the Directory of Public Schools, Ministry of Education, Youth and Culture, 1997/1998), followed by interviews with a purposeful sample of 20 teachers. There were eight individual and three focus-group interviews. An analysis of the responses resulting from the questionnaire and interviews indicated findings in relation to the research questions: How do Jamaican Grade 1 teachers in urban primary schools assess their pupils' academic performance, and how do they use the information from such assessments? The results of this study indicate that the assessment procedures used by these teachers are testing, oral assessments (including questioning and discussion), observation, and performance assessments. Of these four, testing was and remains the dominantly used form of assessment. Teachers used the information resulting from these assessments to make decisions about lesson planning and instructions; provide information about pupil performance and progress; identify pupils for placement and selection; detect pupil characteristics and needs; inform teachers, school administrators, and parents of pupil performance; and prepare reports and cumulative records. Other findings include the understandings held by Grade 1 teachers of assessment, factors that influence teachers' assessment practices, and the teachers' use of the Grade 1 Readiness Inventory (GRI).

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CHAPTER 1
A STUDY OF THE ASSESSMENT PRACTICES OF GRADE 1
TEACHERS IN AN URBAN AREA OF JAMAICA

Introduction

During the late 1980s, a National Assessment Programme (NAP) was developed to measure performance at different levels of primary schooling in Jamaica (Miller, 1992). Its basic function was instructional, and its objective sought to enable teachers to make more informed decisions about pupil progress and instructional concerns (Faulkner & Porter, 1995; Miller, 1992). I became involved in the design of the first NAP instrument to be administered to children entering primary school. This was the Grade 1 Readiness Inventory (GRI; see Appendix A), a reading readiness test for children entering primary school. Subsequently, it was disturbing for me to read in a World Bank report (1993) that, "There is evidence, however, that some teachers are using this and/or other instruments to select children for Grade 1 and that some children are either sent back to basic school or to another 'less desirable' primary school" (p. 78). Since then, I have had a growing concern for the kind of assessment practices which are used by Grade 1 teachers, and the influence that the Readiness Inventory has had on these teachers as they taught and assessed their pupils.

Historically, the Jamaican educational system has had a test-oriented tradition from primary to tertiary levels (Faulkner & Porter, 1995). Teachers use many formative methods of arriving at decisions about their pupils and instruction (Genishi, 1995). However, summative decisions are, to a large extent, based on pupils' performance on tests and examinations. In 1981, the teacher education programme in Jamaican teachers' colleges was revised (Miller, 1995), and one of the newly-introduced courses was "An Introduction to Classroom Testing and Measurement" (CTM; see Appendix B). As a lecturer in teacher education with experience in teaching the course CTM, I became interested in the influence of this course on the assessment practices of primary school teachers. Evidence of research findings on the extent of such an influence was not readily available.

The current literature on assessment practices is dominated by proponents who recommend the use of a variety of assessment practices in the classroom (Brewer, 2001; Eliason & Jenkins, 1999; Stiggins, 1997; Bergan, & Feld, 1993; Nickerson, 1989). Such practices are designed to be developmentally appropriate for young children, and include strategies such as portfolios, checklists, and projects (Brewer, 2001; Genishi, 1995). Teachers' assessment practices result from and are influenced by many factors (Wiggins, 1993). These include assessment and developmental theories (Brewer, 2001; Popham, 1999).

This study used a combined quantitative and qualitative approach to document systematically: (a) what Grade 1 teachers' assessment practices were used in a large urban area of Jamaica, (b) the kinds of information which were generated from these assessment practices, and (c) how this assessment information was used. Essentially, the aims of this study were to identify and describe the current assessment practices of Jamaican Grade 1 teachers. It was my belief that (a) Jamaican first grade teachers in urban schools used tests and a variety of alternate strategies to assess their pupils; (b) instructions resulting from lesson and programme development, especially at the beginning of Grade 1, were influenced by the GRI; and (c) that these teachers' assessment practices were influenced by the course CTM.

Background to the Study

In Jamaican primary schools, decisions about pupil performance and subsequent lesson and programme development were mainly made on the basis of teacher-made tests. According to Faulkner and Porter (1995), emphasis was placed on the use of formally administered tests and examinations for selection or certification, and the use of teacher-made tests for instructional purposes (p. 7).

In an attempt to measure the achievements of primary schooling in terms of curriculum objectives, the National Assessment Programme (NAP) was introduced as a pilot project in Jamaica in 1987 (Miller, 1992). At the time of this study, the NAP comprised: The Reading Readiness test in Grade 1 (GRI); Diagnostic Tests in Mathematics and Language Arts in Grade 3; the Grade 4 Literacy Test; and Achievement Tests (Grade Six Achievement Test [GSAT]) in Mathematics, Language Arts, Social Studies, Science, and Writing administered toward the end of Grade 6 (The National

Assessment Programme: Your Questions Answered, 1998). It had been suggested that the development of such public forms of assessment met administrative and political needs, and was justified in terms of the selection and certification of pupils (Chuck, 1998; Miller, 1992). Yet the significance of the formal nature of the NAP and the increased frequency of standardized testing might result in teachers teaching to the test (World Bank, 1993; Bergan & Feld, 1993; Kamii, 1990; Shepard, 1989). This in turn may lead to a narrowing of the curriculum and the restricted use of assessment strategies other than paper and pencil tests similar in format to the NAP.

However, there may be problems associated with the use of teacher-made tests. Questions are raised about the validity and the reliability of the inferences that are drawn from teacher-developed assessments (Worthen, 1993).

There are many factors which influence teachers in the way they assess their pupils. For example, decisions made about young children might be influenced by the beliefs and philosophies of their teachers (Fang, 1996). The type and length of pre-service and in-service teacher-preparation programmes might be influential in teachers' classroom practices. In Jamaica, since 1981 student teachers have been exposed to the single compulsory course in classroom assessment, An Introduction to Classroom Testing and Measurement (CTM, see Appendix B). Intended for all pre-service students, whether to teach the early childhood, primary or secondary grades, the course is taught in one semester, for a duration of 45 hours. The basic concepts of this course include testing, assessment, measurement, evaluation, criterion-referencing, and norm-referencing. More specific topics include: (a) different types of tests, (b) reasons for testing, (c) qualities of a good test, (d) types of objectives, (e) preparing a specification table, (f) test formats, (g) constructing a test, (h) test scoring, and (i) an introduction to basic statistical concepts and procedures. All Jamaican teachers' colleges refer to a common course outline for this course and all pre-service teachers are administered a common examination paper in an attempt to provide a uniform experience. Consequently, it might be expected that a common set of strategies may be used by teachers of Grade 1 classes.

Teachers in the Jamaican educational system are required to conduct assessments of their pupils' academic performance (The Education Act, 1980, Ministry of Education, Youth, and Culture, 1995). According to Whyte (1983), "Examinations are used as a

basis for selecting entrants to all levels of education beyond the Primary stage as well as to job opportunities" (p. 137). In Jamaican primary schools, teachers have traditionally used tests and examinations for summative evaluation (Faulkner & Porter, 1995). During the current introduction of the NAP, studies have been focused on the performance of pupils as measured by (a) the GRI, (b) the Grade 3 Diagnostic tests, (c) Grade 4 Literacy test, and (d) the Grade 6 Achievement tests (Miller, 1992). Research findings do not reflect a focus on how teachers, especially those who teach Grade 1 classes, arrive at formative assessments of their pupils.

Jamaican educational practices and innovations are influenced by external sources (King, 1994), more specifically from Great Britain and North America. According to the proponents of appropriate practices for young children in Great Britain and North America, teachers use information collected by means of a variety of alternative strategies and methods to make decisions about their pupils (Brewer, 2001; Popham, 1999; Birenbaum & Dochy, 1996; Blenkin & Kelly, 1992). These strategies include portfolios, anecdotal records, checklists, observations, rating scales, and projects. Based on research findings in Jamaica, primary school teachers' assessment practices in Grades 3 to 6 frequently involve tests (Faulkner & Porter, 1995). Current research does not indicate how Grade 1 teachers in Jamaica assess their pupils; this brings me to the purpose of this study.

Statement of the Problem

The purpose of this study is to investigate the assessment methods and strategies that are used by Grade 1 teachers of urban schools in Jamaica. Through this study, the following questions will be answered: How do Jamaican Grade 1 teachers, in urban primary schools, assess their pupils' academic performance, and how do they use the information from such assessments? More specifically,

1. What are the assessment strategies used by these teachers?
2. What decisions are made as a result of the information gained from assessments?
3. How do teachers make use of the Grade 1 Readiness Inventory (GRI)?
4. What understandings of assessment are held by Grade 1 teachers?

5. To what extent are these teachers' assessment practices influenced by the CTM course?

6. What are some of the factors that influence Grade 1 teachers' assessment practices?

Theoretical Framework

During a typical day teachers play a multiplicity of roles. Among these roles is that of assessor and evaluator (Stiggins, 1997; Gullo, 1994; Stiggins & Conklin, 1992). There are many instruments, strategies, and approaches which can be used to inform pedagogy. In recent times, an inclusive term which has been adopted to reflect a systematic method of arriving at decisions about pupils' academic performance is assessment (Popham, 1999). McLean, Bailey, and Wolery (1996) define assessment as being, "a generic term that refers to the process of gathering information for the purpose of making decisions" (p. 12). According to Shepard (1996), assessment refers to "more developmentally appropriate procedures for observing and evaluating young children" (p. 206). More recently, Brewer (2001) defines assessment as "using a variety of strategies in an effort to uncover the understanding and determine the development of individual children" (p. 478). While she argues that in contrast to testing "assessment is ongoing. A test is a sample of behaviour or knowledge taken at a specific time. Assessment covers a much longer time frame and attempts to sample a much broader spectrum of behaviour or knowledge" (p. 478). During the past two decades the emphasis placed on tests as an assessment device has been somewhat overemphasized (Shepard, 1996; Blenkin & Kelly, 1992). Paciorek and Munro (1996) suggest that, "testing 4-, 5-, and 6-year-olds has been excessive and inappropriate. Given this history of misuse, . . . the burden of proof must rest with assessment advocates to demonstrate the usefulness of assessment and to ensure that abuses will not recur" (p. 120).

Teachers use various means of arriving at decisions about their young pupils' academic performance, as well as for instructional and programme planning (Brewer, 1998; Genishi, 1995). These decision-making processes include, to a large extent, the use of standardized tests and examinations, and other assessment methods or strategies (Brewer, 1998; Rogers, Maguire & Leighton, 1997; Genishi, 1995; Blenkin & Kelly,

1992;). Scates (1943) describes the use of various assessment strategies in the classroom as an "interplay between objectivity and judgment" (p. 6).

The literature on classroom assessment is controversial. Proponents of the use of standardized tests and examinations express concern for the subjectivity or lack of objectivity, validity, and consistency of using alternative methods for assessment. According to Nava, Josefa, and Loyd (1992), "little is known about the specific criteria that teachers, in general, include in grading, or how the specific criteria are evaluated and used in combination when teachers make decisions on a student's end-of-term grade" (p. 21). The critics of standardized testing charge that: (a) they provide false information about the learning that goes on in schools; (b) they are discriminatory, and tend to be biased against specific groups of students (for example, minority students, those with limited proficiency in English, and students from low-income families); (c) they often reduce teaching to mere preparation for testing; and (d) they focus attention, time, and energy on skills which can be represented in particular test formats, while higher-order skills, creative endeavours, and processes are ignored (Blenkin & Kelly, 1992; Haney & Madaus, 1989).

According to Shepard (1989), "Educators should use a variety of assessment measures" (p. 2) which should be redesigned to more closely resemble real learning tasks. Such "a variety of assessment measures" includes (in addition to teacher-made tests) projects, conferences, observations, student self assessment activities, portfolios, learning logs, and contracts, among others. Wolf (1988) states, "From students' projects, portfolios, and interviews, . . . teachers . . . are learning to 'read' students' growth in learning from beginning ideas to final products" (p. 30).

Definition of Terms

In providing for consistency of meaning throughout the study, the following terms are operationally defined:

Assessment. The process of collecting and interpreting information that can be used

        (a) to inform students, and their parents or guardians where applicable, about the progress they are making toward attaining the knowledge, skills, attitudes, and behaviours to be learned or acquired, and (b) to inform the various personnel who make educational decisions (instructional, diagnostic, placement, promotion,

graduation, curriculum planning, programme development, policy) about students (Principles for Fair Student Assessment Practices for Education in Canada, 1993, p. 1).

Strategy, method, or technique. A procedure or a systematic means by which assessment is accomplished.

Alternative assessment. Assessment procedures other than tests and examinations.

Validity. The degree to which an assessment strategy measures what it purports to measure; the degree to which an inference resulting from a test is truthful.

Reliability. The degree to which information from assessment strategies are consistent, dependable, or repeatable. The degree to which such information may be attributed to actual differences in pupils' performance rather than to error of measurement.

Testing. A formal procedure for administration, scoring and interpretation of tests and exams. A formal procedure for carrying out assessment (NAEYC, 1988).

Readiness test. A test that assesses a pupil's level of preparedness for a specific academic or pre-academic programme (NAEYC, 1988).

Standardized test. A test composed of empirically selected items that is to be used for a specific purpose. It is based on adequately determined norms, and data on reliability and validity (NAEYC, 1988).

Rationale of the Study

In Jamaica, there is currently limited local literature and research documentation available in the areas of early childhood education and academic assessment. The need for research in these areas is great. Reference has already been made to the lack of research which has been conducted in Jamaica in the areas of primary education, and more specifically in relation to the assessment of pupil performance in the lower grades of primary school (Miller, 1994). Indeed, since the introduction of the GRI, it is not known whether this form of assessment has had any significant influence on Grade 1 teachers and their assessment practices. Neither is there information available which has been generated from research on the extent to which these teachers' assessment practices have been influenced by the course in classroom assessment. Generally, there is very little information available about the assessment practices of Grade 1 teachers in Jamaica.

Findings from this study will contribute to the current limited existence of information on and research in the assessment practices of first grade teachers in Jamaica. Such findings will also add to information already existing about assessment practices used with young children in the Caribbean region, and other Third World countries which share similarities to those existing in the Jamaican educational milieu and cultural context. The results of this study will also have implications for future research carried out in early childhood educational assessment.

As a result of this study, if there is greater understanding of what teachers do as they assess their young pupils, then support can be provided to these teachers and their practices. Other teachers may be led to make improvements or changes to their methods of assessment.

Although much recent controversy has arisen over the matter of assessment practices, the findings of this study should sensitize teachers, parents, principals and administrators to the many factors which contribute to, or influence the assessment of young children's academic performance. Hopefully, decisions regarding children's instructional and programme development could be made on the basis of more deliberate insight, that is, meaningful, relevant and appropriate to evaluation (Spodek & Saracho, 1997). As well, it is hoped that any innovation in teachers' assessments will contribute towards goals of student learning enhancement and improvements in communicating about academic performance (Cizek, 2000).

Teachers will be afforded the opportunity to reflect on their assessment practices in order to investigate how such practices might be influenced by their beliefs, philosophy and expectations. It is anticipated that with teachers' growing awareness of their assessment practices, children will benefit from being evaluated by more holistic and varied assessment methods (Brewer, 2001; Brewer, 1998; Genishi, 1995; Gullo, 1994; Blenkin & Kelly, 1992; NAEYC, 1991; Shepard, 1989).

CHAPTER 2
LITERATURE REVIEW

Introduction

Assessment is an essential element of the educational process (Stiggins, 1997; Genishi, 1995; Blenkin & Kelly, 1992; Stiggins & Conklin, 1992). Progress through the stages of education requires and is facilitated by the assessment of both learning needs and academic achievement. In Jamaica today, very little information is available on the assessment practices of primary teachers. Given that assessment is an integral aspect of the educational process, it is troublesome that so little is known about this area. This review of literature appears in two major sections. In section one, a brief history of assessment in early childhood education is followed by a general review of teachers' understandings of assessment and its purpose. A summary of the guidelines for assessment follows, and the section culminates with assessment methods available to Grade 1 teachers. Section two is about the Jamaican context, and begins with a brief description of Grade 1 in Jamaica. A summary of the National Assessment Programme along with a description of the Grade 1 Readiness Inventory (GRI) follows. The section culminates with a description of the course, Classroom Testing and Measurement (CTM).

Historical View of Assessment in Early Childhood Education

Developmental change in young children is rapid. Indeed, interest in studying young children to gain an understanding of their growth and development is apparent in the early work of Pestalozzi, when he wrote about the development of his three-and-a-half-year-old son in 1774 (cited in Irwin & Bushnell, 1980). In 1826, Froebel's *Education of Man* (cited in Wortham, 1990) focussed attention on the characteristics and needs of children. During the early to mid-twentieth century, Piaget and Montessori also carried out research on the developmental needs and stages of young children, which even today contributes seminal benchmarks for scholarly work involving young children (Wortham, 1990). Observation and study of these children were not limited to research. Parents and medical and other professionals also collected information on young children for a variety of reasons. According to Wortham (1990),

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Prior to the 1960s, tests for preschool children were developed for use by medical doctors, psychologists, and other professionals serving children. Developmental measures, IQ tests, and specialized tests to measure developmental deficits were generally used for noneducational purposes. Child study researchers tended to use observational or unobtrusive methods to study the individual child or groups of children. School-age children were tested to measure school achievement, but this type of test was rarely used with preschool children. (p. 5)

During the mid-1900s, concern was created over the discrepancy between the academic performance of children in different socio-economic groups. The United States Federal government made funds available for programmes such as Head Start which sought to remedy the disparity between social classes. Resulting from Head Start, new measures were developed to assess individual progress and programme effectiveness (Wortham, 1990). Both formal methods (standardized instruments) and informal instruments and strategies were called for. Subsequently, such measures contributed to new strategies and resources which could be used in the assessment of young children in the classroom.

Since the 1980s, an effort to improve education at all levels included the use of standardized tests to provide accountability for students' learning. According to Wortham (1990),

Minimum competency tests, achievement tests, and screening instruments were used to ensure that students from preschool through college reached the desired educational goals and achieved the minimum standards of education that were established locally or by the state education agency. (p. 8)

An increased use of testing at all levels of the educational system has resulted in concern expressed by early childhood specialists (NAEYC & NAECS/SDE, 1991). Wortham (1990) states that, "Standardized tests and other informal measures are now being used in preschool, kindergarten, and first grade to decide whether children will be admitted to preschool programs, promoted to first grade or placed in a transitional classroom, or retained" (pp. 8-9). Now more than ever, proponents of developmentally appropriate practices for young children advocate that teachers should be informed about the measurement of these children and when and how it should be conducted (Hills, 1993).

Teachers' Understanding of Assessment and Its Purpose

For the teacher, assessment is interpreted as, the "use of a comprehensive evaluation system to determine the quality of a programme or the progress of a child" (Brewer, 1998, p. 511). The early childhood teacher's understanding of the process of assessment involves (Gullo, 1994): (a) when and how to use assessment; (b) how the pupil's development affects the process; and (c) the relationship between assessment and a curriculum which is developmentally appropriate for the pupil. According to Brewer (1998), "Assessment alone does not improve children or programmes. . . . Only when assessment has a purpose and is used to help make decisions about curriculum, about individual children, and about programs can it help a child or program grow" (p. 462).

In the case of the child's progress, the teacher assesses her pupil's social, emotional, and physical development, in addition to the pupil's intellectual growth. When teachers want to know how their pupils are doing, or how effective their programmes are, they undertake assessment. The literature reveals that although testing has become a significant way of measuring pupils' abilities and schools' performance, testing and assessment are not to be interpreted as synonymous (Brewer, 2001; Brewer, 1998; Birenbaum & Dochy, 1996; Blenkin & Kelly, 1992). Assessment encompasses more than testing. It involves using a variety of strategies to gain a more comprehensive and varied understanding of the abilities and performance of pupils, and the value of programmes and schools (Brewer, 2001). Whereas testing is formally administered, and allows for a sampling of behaviour or knowledge at a specific time, assessment is on-going, can be formal or informal, may cover a brief or extended period of time, and is broader in coverage of behaviour or knowledge (Brewer, 2001). Ideally, assessment is to be conducted with a purpose in view, and the outcomes or results should contribute to decision-making about individual or groups of children, the curriculum, or programmes. The overall characteristics of assessment as it applies to a school programme, are summarized by Hills (1993):

> Assessment will serve the best interests of children when it is carried out as an integrated part of an overall program, when it contributes positively to children's self-esteem and developmental progress, and when it recognizes children's individuality and respects their family and community backgrounds. Assessment that will accomplish these ends is continuous, broadly focused on child development and learning, sensitive to children's diversity, integrated into their

day-to-day activities, and designed to reap benefits for them, through teachers' knowledgeable planning and teaching and through clear communication between school and home. (p. 28)

Whatever form of assessment strategy or method used, it is necessary for teachers to examine individual growth and development within the context of what pupils do. According to Terwilliger (1971), "It is primarily the teacher who transmits the knowledge, skills, and values of [our] society and it is also the teacher who judges the extent to which these have been acquired by students" (p. 5). The results from assessment methods and strategies help to decide whether pupils are to be admitted to programmes, placed appropriately for effective instruction, promoted to another class, or retained (Wortham, 1990). They also contribute to monitoring, revising, and implementing curricular approaches and changes appropriate for each child.

Such decisions are also influenced by the teachers' beliefs and expectations (National Institute of Education, 1975, cited in Fang, 1996). Fang continues to point out that, "Many teachers proceed on impulse and intuition in teaching, relying on personal experience rather than on reflective thought and professional education" (p. 51). It therefore appears that classroom teachers are influenced by their theoretical orientations, beliefs and expectations, and impulse and intuition when making pedagogical decisions in regard to their pupils (Gullo, 1994).

Guidelines for Assessment

In response to a growing emphasis on assessment (both formal and informal) during the 1980s, and a demonstrated need by early childhood professionals to receive informed guidance in selecting what to teach and when, and how best to assess children's progress, the NAEYC and NAECS/SDE (1991) issued a joint position paper on curriculum content and assessment. Shepard (1994) summarizes the guiding principles (NAEYC & NAECS/SDE, 1991) as follows:

1. Assessments should bring about benefits for children, or data should not be collected at all;

2. The content of assessments should reflect and model progress toward important learning goals;

3. The methods of assessment must be appropriate to the development and experiences of young children; and

4. Assessments should be tailored to a specific purpose. (p. 208)

According to the *Principles for Fair Student Assessment Practices for Education in Canada* (1993), methods of assessment should adhere to appropriateness and compatibility in regard to the purpose and context of the assessment. The document stresses five major interrelated principles. Within each principle are guidelines which are germane to assessments which take place in Grade 1. These are paraphrased and presented below:

1. **Developing and choosing methods for assessment**. Validity should be established, in that inferences made regarding each pupil's knowledge, skills, attitudes, and behaviours are not open to misinterpretation. Assessment methods should reflect instructional goals and objectives, and be compatible with approaches used during instruction. Using a variety of assessment strategies ensures comprehensive and consistent representation of student performance. Such strategies should be sensitized to pupils' background and experiences.

2. **Collecting assessment information**. Assessment information may be collected in a variety of ways, some of which are referred to as alternate assessment procedures. Accuracy and manageability of measurement are factors to be considered when selecting appropriate procedures. Guidelines should be documented and made available when alternate procedures for assessment are to be used.

3. **Judging and scoring student performance**. This involves the process of determining the quality of pupil performance, the appropriateness of attitude or behaviour, or correctness of response which are to be assessed. A procedure for guiding the process of judgment (e. g. criteria for scoring) is to be prepared by the teacher.

4. **Summarizing and interpreting results**. This refers to the pedagogic decisions which result from the use of assessment methods. Pupils and their parents or guardians should be made aware of the ways in which decisions and judgments have been arrived at, and the basis for interpretation described and justified. Interpretations of assessment should take the pupils' backgrounds and learning experiences into account.

5. Reporting assessment findings. Guidelines should be prepared by the school or jurisdiction to ensure consistency of the reporting system. Pupils' strengths and weaknesses, progress, needs and competencies are among the characteristics which should be reported as a result of assessment findings. Pupils and their parents or guardians, along with their teachers may engage in a collaborative effort towards a more comprehensive evaluation of the pupils' holistic performance.

Although the principles summarized above address the Canadian educational system, fair assessment practices may be generically applied to situations in other countries, in this case, to Grade 1 in Jamaica. Such assumptions and recommendations are applicable as long as assessment refers to the process of collecting and interpreting information about the progress pupils make toward attaining knowledge, skills, attitudes and behaviours.

Assessment Methods and Strategies

The *Principles for Fair Student Assessment Practices for Education in Canada* (1993) defines assessment methods as being

> the various strategies and techniques that teachers might use to acquire assessment information. These strategies and techniques include, but are not limited to, observations, text-and curriculum-embedded questions and tests, paper-and-pencil tests, oral questioning, benchmarks or reference sets, interviews, peer-and self-assessments, standardized criterion-referenced and norm-referenced tests, performance assessments, writing samples, exhibitions, portfolio assessments and project and product assessments. Several labels have been used to describe subsets of these alternatives with the most common being "direct assessment," "authentic assessment," "performance assessment," and "alternative assessment." (p. 3)

The document promotes a variety of assessment methods which depend on the (a) characteristics and needs of pupils (such as their experiences, abilities, developmental stages and learning styles among others), (b) conditions of instruction (including goals and objectives, consequences of decision-making based on the information gained from assessment strategies), and the policy of the relevant school, institution or jurisdiction. This document is supported by a number of early childhood education and assessment proponents (Brewer, 2001; Perrone, 1991; Wiggins, 1990; Wolf, 1989; NAEYC, 1988; Stiggins & Bridgeford, 1986). According to Shepard (1989), "Educators should use a

variety of assessment measures, make substantive improvements to standardized tests, and remove incentives to teach to the test" (p. 2).

In Jamaica, this seems to be problematic against a backdrop of traditional test orientation in the educational system. There is indeed a wide variety of assessment strategies available from which the teacher of young children may choose. Both formal and informal methods of assessment are administered to young children. Such an array of assessment methods and strategies are not limited to measuring specific and isolated facts, and may be used to measure problem-solving ability, communication skills, divergent thinking, and holistic understanding of concepts. Very often, these strategies may measure real-life tasks and allow pupils to exercise self-evaluation (Lee, 1992).

Readiness Testing

Based on a review of the literature on early childhood assessment, there are current controversies regarding assessment practices which suggest that "readiness" is perceived as being more than "isolated academic skills" (Langhorst, 1989, p. 19). It is felt that the focus of the curriculum and instructional practices should be on the various needs of children entering school, rather than screening for those who do, or do not meet certain isolated requirements of a curriculum. Frequently, the items on an instrument isolate skills within a context which is unfamiliar to the pupils.

As such, there is a resulting search for more developmentally appropriate means of assessment. In the past decade, an increased focus has been on the use of alternate methods such as observation and collection of work samples in portfolios, for example. There remain those who caution that an exclusive focus on developmental appropriateness should not lead to losing sight of fundamental questions and concerns regarding the academic content of the curriculum (Spodek, 1988). Readiness testing and other incremental assessment procedures that punctuate a pupil's primary education are supported by many stakeholders. Among them, policy-makers, and curriculum decision-makers generally anticipate and justify the continuity of such assessments due to the following underlying purposes (Langhorst, 1989; Blenkin, 1992; Whyte, 1983; Chuck, 1998; and Wint, 1998): (a) to provide information on groups of pupils for school, district, or national policy decisions; (b) to assess pupils' levels of existing knowledge and skills in order to facilitate individualizing instruction and the curriculum; (c) to facilitate

evaluation of, for example, pupils, teachers, schools, and curriculum; and (d) to provide the substantive means for accountability.

Teachers of young children are continually engaged in a re-examination of the curriculum content and instructional methodology which must be woven into their daily, weekly, or monthly lesson-planning. They do this within their understanding of relevant constructs and theories appropriate for their group of pupils (Brewer, 2001; Meisels, 1989). Definitions for constructs such as "readiness" are ever-changing. This makes it crucial for the teacher to examine how well the items and content of any given assessment instrument reflect current theory and practice (NAEYC, cited in Brewer, 2001). Such considerations are usually accounted for when teachers create their own informal assessment tools, methods, or strategies and procedures for their day-to-day instructional planning and practice. As a corollary, when selecting formal assessment instruments, teachers' judgements are used as the criteria for evaluating such items and measures.

A significant reason for using formal assessment instruments, such as a readiness inventory, is that they are designed to determine what children can do when compared with others of their age. Readiness tests are also expected to determine each child's mastery of skills which will assist in predicting the child's success in coping with an instructional programme (Brewer, 2001).

Grade 1 in Jamaica

As of September 1974, Grade 1 was the official beginning of compulsory, state-provided primary education in Jamaica (The Gleaner Company Ltd., 1995). Although the national teacher-pupil ratio in Grade 1 was 1:45 (Statistical Unit, Ministry of Education, Youth and Culture, 1996/97), there were many Grade 1 classes, in the urban area in which the present study was conducted, where the class sizes exceeded 45. Generally, Grade 1 teachers and pupils were guided by a national curriculum for primary schools.

Assessment in Grade 1 in Jamaica

In outlining the role of the primary school teacher in Jamaica, Schedule D, Article 44 of the Education Regulation (Education Act, Ministry of Education, Youth, and Culture (1980) states, "In addition to regular teaching activities a teacher's duties shall include—a) developing lesson plans on a regular basis; b) evaluating and testing students;

c) keeping adequate records of students' progress" (p. 27). These three specific duties of the Jamaican primary school teacher were inclusive of the teacher's assessment practices. For the teachers of first grade, as for all primary school teachers, assessment of academic performance for a summative evaluation, that is by the end of each school term or the academic year, was mostly dependent on cumulative scores obtained from informal teacher-made tests, alternate assessments, and, in particular, from end-of-year exams which cover the academic year's programme. For all grades in most primary schools, the end of year (and in many instances end of term) test results were generally considered more important for the judgements and decisions made about students.

National Assessment in Jamaica

In Jamaica, examinations were used as a basis for entry into all levels of education beyond the primary stage (Faulkner & Porter, 1997; Faulkner & Porter, 1995; and Whyte, 1983). The National Assessment Programme (NAP) was one of a series of educational reforms devised and outlined in the Social Well Being programme of the 1980s which included, inter alia, the Programme for the Advancement of Childhood Education (PACE) and the Reform of Secondary Education (ROSE) (Chuck, 1998). Through the NAP, the Grade Six Achievement Tests (GSAT) were seen as a replacement for the Common Entrance Examination (CEE), a selection test administered at Grade 6 in all primary and independent schools. The last administration of the CEE was completed in January, 1998 (Chuck, 1998; Wint, 1998). Implementation of the NAP anticipated regular testing of children as they proceeded through the primary grades, starting with the Grade One Readiness Inventory (GRI), followed by the Grade 3 Diagnostic tests, the Grade 4 Literacy test, and the Grade 6 Achievement tests. All of the tests were centrally developed and formally administered and scored through the NAP office, which was housed in the Ministry of Education, Youth and Culture. As a part of the NAP, teachers were trained to administer and score the instruments, and results were made available to teachers and schools (Faulkner & Porter, 1997).

According to Faulkner and Porter (1997), "The Ministry of Education, Youth and Culture's goal of improving the quality and equity of the basic education system (Grades 1-9), has implications for an improved assessment system and for a change in the way that assessments are perceived." The goals of the NAP were identified as

(a) improving the quality of assessment instruments and procedures used in schools and by the Ministry of Education, Youth and Culture; (b) providing schools with feedback on their pupils' performance in effecting modifications to schools' curricula and learning and teaching programmes, as well as facilitating decisions about individual students' progress; and (c) making available information for the evaluation of schools' performance, and for policy-making at both School and Ministerial levels.

Grade 1 Readiness Inventory (GRI)

For purposes of this study, focus was placed on the significance of the GRI as the initial national assessment instrument to be administered in Jamaican primary schools. A copy of the GRI is provided in Appendix A. The purpose of the GRI is "to assess the Grade 1 pupil's academic readiness skills, that is, cognitive skills considered critical for him/her to successfully undertake the next phase of his/her education" (Ministry of Education, Youth and Culture, 1996, p. 4). Following the administration of the Inventory, an analysis of the pupils' performance results is made available to the schools. The intent is to allow teachers to make use of the information, and enable them to (a) meet the needs of pupils at different levels through instructional programme planning; (b) develop and/or select appropriate instructional materials and strategies; (c) verify or discount assumptions about pupils' entry skills, which are made in the Grade 1 curriculum guides; and (d) identify pupils who may benefit from further testing or specific intervention.

The GRI, like other screening tests and instruments administered at this level, focused on tasks that are considered basic to the development of more complex skills. In the GRI, such basic skills are categorized as Visual, Motor, and Auditory skills, and beginning knowledge for numeracy and literacy. The Inventory comprises four subtests:

1. Visual Motor Co-ordination. The focus of this subtest is on the development of eye-hand co-ordination. Items require pupils to join lines; colour a picture; and complete, copy, and write figures, letters, and words.

2. Visual Perception. Subtests in this section focused on:

   a. Discrimination. These items require the pupils to identify, and distinguish among objects, numerals, letters, words, and patterns for similarities and differences.

b. Memory. For these items, pupils are tested on their ability to remember objects and details shown to them.

c. Figure ground. Pupils are required to identify, outline, or mark objects, shapes, and figures from a complex background, or grouping.

3. Auditory Perception. This subtest consists of the following four areas:

a. Memory. These items require pupils to demonstrate the ability to remember what they hear.

b. Association. Pupils are required to identify pictures that illustrate words, objects, and activities.

c. Listening comprehension. For some of these items, pupils are required to listen and recall specific information. There are also tasks requiring pupils to sequence pictures of activities, events, and sections of stories.

d. Discrimination. Pupils are required to identify pictures of objects with the same beginning sound as that of another given picture.

4. Number and Letter Knowledge. The items of this subtest focus on the pupils' ability to identify numerals, make sets of objects (1-6), associate sets with numerals, and demonstrate 1 to 1 correspondence. Pupils are also required to identify letters and to sequence letters as they are found in given words.

The recommendation from the Ministry was that the GRI be administered to all students in Grade 1 during the second and third week of the school year. It was a group test, ideally administered to 20-25 pupils each time. As it was not a timed test, pupils were allowed to complete each task or item before moving on to the next. However, teachers were encouraged to exercise discretion in moving onto another item or task when pupils appeared to be experiencing great difficulty. Subtests were administered one per session, with a maximum of two in one day. Teachers were advised against administering the Visual Perception and the Auditory Perception subtests on the same day. Other rudimentary procedures including the distribution of materials, seating of pupils, oral instructions to be delivered, and general teacher-pupil rapport relevant to the administration of the GRI were outlined for teachers in the Readiness Inventory Handbook (Ministry of Education, Youth and Culture, 1996).

GRI Evaluation

The GRI has been administered nationally since 1997 (Ministry of Education and Culture, 1999). In 1994, a pilot study of the GRI was conducted by the Ministry of Education, Youth and Culture (Ministry of Education, Youth and Culture, 1996). In that year, the GRI was administered to 8,374 Grade 1 pupils in a national sample of 128 schools. The findings suggested that there were factors which threatened the reliability of the GRI results. These factors included large class sizes (some over 60 pupils), noise, and student behaviour (e.g., restlessness and inattentiveness affected the administration of the Inventory). Also, teachers submitted only results (i.e., score sheets) to the researchers, and not the actual test/answer booklets. Therefore, analysis was not conducted on pupils' responses, which raised questions regarding the reliability of the results. Of the study's recommendations, the following applied to the instrument as an assessment tool:

1. Schools should ensure the GRI is administered to no more than 25 pupils at any one time;

2. The GRI should be shortened by collapsing several subtest categories; and

3. Modifications should be made to the test-language as used in the test, and by teachers during administration.

A subsequent report of the GRI (Final Report 1993-1999, Ministry of Education and Culture, 1999) added the following results:

1. A final version of the GRI was designed in 1996 (p. 34) with the following modifications: (a) further reduction in the categories and the number of items per category, (b) deletion of left to right orientation as a category, (c) introduction of auditory perception as a category (combination of auditory perception and language skills of 1986 version), (d) introduction of new tasks for the auditory discrimination, and figure ground, and (e) introduction of letter knowledge.

2. Ideally, the test should be administered in a one-on-one situation. However, "small group administration has been robust, but has to be monitored especially regarding the noise level and other factors that may affect the students' performance" (p. 35).

3. Factor and reliability analyses conducted on the 1995 86-item test form indicated "one general factor, and an overall reliability of alpha=0.98 for the test as a whole" (p. 35).

4. A shortened test comprising 33 items on the 1996 test form saw a reduced reliability of alpha=0.89. Resulting benefits of the shortened test were seen in less time required for administration.

5. As class size exceeded 40 in most cases, administration of the test to no more than 25 pupils would demand split groups.

6. In 1997, 680 teachers islandwide were trained during two-day workshops on the NAP. School-based coordinators, trained in administering, scoring, and interpreting the GRI results, were expected to assist Grade 1 teachers in these tasks.

7. As a result of validation studies conducted to examine the administration of the GRI in schools the following report was made:

The aim of these studies was to identify and verify factors that could potentially make the results from a particular school invalid. The major factor identified was attempting to administer the test to more than 25 students at any one time. This factor could make it impossible to make sure that students are working independently, that students are hearing the instructions, are seeing the charts that are shown, and are keeping pace with the teacher. (p. 37)

The GRI emphasized the acquisition of specific skills, for example, in visual and auditory perception, left-to-right orientation, and basic number knowledge. It, therefore, focused primarily on the cognitive development of first grade pupils. In the young pupil's classroom, there is the need for teachers to make use of forms of assessment which support children's physical, social, and cognitive development (Brewer, 2001; Shepard, 1996; Genishi, 1995). This may be referred to as being a holistic assessment approach (Blenkin & Kelly, 1992). As well, Blenkin's (1992) argument about readiness tests generally, may apply to the introduction of the Readiness Inventory into the Jamaican Grade 1 classroom. According to Blenkin (1992), the introduction of readiness tests has inadvertently motivated many Grade 1 teachers to teach to the test and to use the instrument as a means of accountability. Such an abuse of readiness testing is not in

keeping with the features of an assessment which should be tailored to match the purpose of the assessment (Shepard, 1994).

Classroom Testing and Measurement Course

Introduced in 1981 (Miller, 1995), the CTM (see Appendix B) course is a compulsory education course completed by student-teachers undergoing a teacher-preparation programme in early childhood, primary, or secondary education. It is generally offered during the second year of studies for a duration of 45 hours. The rationale for the course states:

> Jamaican classroom teachers are constantly involved in the process of testing and evaluating students. It is imperative that trainee teachers receive formal instruction in order to acquire the knowledge, skills, attitudes, and applied principles of CTM.

> Classroom testing, measurement, and evaluation play very important roles in the process of learning and teaching. Knowledge of the principles of CTM will provide the teacher with a systematic approach to the evaluation of students' achievement in the classroom as well as a knowledge of the many uses of CTM. These uses include:

> a. Testing for the purpose of giving grades (student evaluation). This information allows the teacher to evaluate the student's achievement and forms basis for assigning grades and other marks and for grouping students for academic activities.

> b. Testing for the purpose of determining the student's academic level of achievement (e.g., diagnostics). Test results give information about the student's present abilities and past achievement and enable the teacher to know the starting point to begin teaching a new concept.

> c. Testing for the purpose of enabling the teacher to determine whether or not the lesson has been adequately taught to the students (teacher evaluation). Information allows the teacher to check on progress of students—so the teacher can modify his/her teaching, if necessary. This information also gives the teacher a standard to gauge his/her own effectiveness as a teacher. (JBTE, 1993)

The course comprises six units including: The place of testing, measurement and evaluation in education (3 hours); Types of tests used in education (3 hours); Formulating objectives in the domains of learning (3-4 hours); Test construction (12 hours); Administration & analysis of classroom tests (12 hours); and Elementary statistics for the classroom teacher (3-6 hours).

Summary

From birth, and throughout infancy, the young child undergoes assessment to ascertain developing traits and behaviours, in order to confirm normal, progressive development, and to identify early needs for intervention. Teachers of young children view assessment as a process of information-gathering through observing, recording, and documenting work that their pupils do and how they do it. This process forms the basis for a variety of educational decisions about, and which affect, the pupils (NAEYC & NAECS/SDE, 1991). In the classroom, assessment methods are varied, and must be based on principles for fair practices. In the young child's classroom, the purposes of assessment are: (a) to plan instruction; (b) to communicate information about pupils' progress with parents; (c) to identify children with special needs; and (d) to evaluate programmes (Brewer, 1998; Hills, 1993).

Research provides evidence to support the advantages of using a variety of assessment methods and strategies (Mescher, 1997; Bergman, 1993; Krechevsky, 1991). Use of alternative assessment procedures allows teachers to have many opportunities to observe and record their pupils' performances. Insights gained across settings, contexts, and types of activities best facilitate informed decision-making about pupils' progress and needs, instructional planning, and programme evaluation. A review of the literature also suggests that pedagogical decisions are influenced by teacher beliefs and practices (Fang, 1996; Gullo, 1994).

In Jamaica, achievement by the end of primary school in terms of the national curriculum had never been measured on a systematic basis (Miller, 1992). In addressing this need, a National Assessment Programme was developed and introduced to measure performance at different levels of primary school. The Grade 1 Readiness Inventory was the initial test component of the NAP, and administered to assess "basic prerequisite skills that are necessary for effective learning of the cognitive skills in the Grade 1 curriculum" (Ministry of Education, Youth and Culture, 1996, p. 4). Research, in educational assessment in Jamaica, has focused on the outcomes and performance of pupils resulting from each battery of tests administered through the NAP. A more recent review of the GRI (Ministry of Education & Culture, 1999) has produced recommendations for administration, in-service workshops, and test form changes.

However, what is not known is the extent to which the GRI has influenced the Grade 1 teachers' assessment practices.

All teachers in the primary school system in Jamaica, who have specialized in any of the teacher preparation programmes, have completed the course CTM. The extent to which primary school teachers' assessment practices have been influenced by this course has not been researched. As yet, research findings in Jamaica do not provide information about the current assessment practices of Grade 1 teachers and the use made of the results in decisions about children's education. The purpose of this study is to provide information about these issues.

CHAPTER 3
METHOD OF THE STUDY

Design

In this study, I employed a combination of quantitative and qualitative research methods in an attempt at gaining greater knowledge and understanding of findings related to the research questions (Glesne & Peshkin, 1992; Smith, 1983). In support of the positive outcomes which result from the use of a combined method approach to research, Miles and Huberman (1994) posit, "numbers and words are *both* needed if we are to understand the world" (p. 40). According to Langenbach, Vaughn, and Aagaard (1994), "When focused on the same issue, qualitative and quantitative studies can triangulate—that is, use different methods to assess the . . . stability of the findings" (p. 31). Although this approach added complexity to the design, the hope was to combine the advantages of both the quantitative and qualitative paradigms (Creswell, 1994; Miles & Huberman, 1994; Goodwin & Goodwin, 1996; Smith & Heshusius, 1986). The quantitative component, through the use of a survey questionnaire, allowed for generalizable conclusions (Smith & Glass, 1987). Key informants, identified from this instrument, were interviewed separately or in focus groups in order to probe in detail (Berg, 2001; Berg, 1998) issues and aspects of Grade 1 teachers' assessment practices related to this study.

In this section, I outline the method that was followed in addressing the research questions identified earlier (see pp. 4-5), and describe the combined survey and interview approach that was used. A description of the population, selection of the sample, participants, instruments, and the procedures for data collection and analysis is provided. Also described are the development and pilot testing of the survey questionnaire and interview schedule. Attention is paid to concerns of validity and trustworthiness of the information and data collected, and ethical considerations specific to this study.

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Population

The target population for this study was defined as all Grade 1 teachers in the 104 government-run primary schools in the parishes of Kingston and St. Andrew in Jamaica (Directory of Public Schools, 1997/98). In 1933, the parishes of Kingston and St. Andrew were amalgamated and designated as the Corporate Area. In 1995, the combined population of the two parishes was in excess of 640,000 (The Gleaner Company, 1995). There were 10,385 Grade 1 pupils taught by 474 teachers in the 104 schools (Statistical Unit, Ministry of Education, Youth and Culture, 1996/97).

Selection of Sample and Participants

Survey

Following the granting of approval by the Research and Ethics Committee of the Department of Elementary Education at the University of Alberta, and the Director of Region 1 of the Ministry of Education, Youth and Culture in Jamaica, a two-stage sample design (Smith & Glass, 1987; Creswell, 1994) was used. At phase 1, purposeful cluster sampling (Gall, Gall, & Borg, 1999; Gall, Borg, & Gall, 1996) was utilized. Using the Directory of Public Schools (1997/98), 66 of the 104 primary schools in the Corporate Area were selected based on geographic representation and accessibility. The location of schools ranged from a busy, crowded, urban situation on the streets of Kingston to that of a quiet, isolated rural terrain in the St. Andrew hills. Generally, commuting was difficult and time-consuming. In order to conduct phase 1 within the time frame and still maintain geographic representation, the schools selected in each area were within close proximity.

The principal of each sampled school was sent a description of this study and a letter of introduction (see Appendix C). The principals were then contacted by phone to confirm receipt of the previous communication, remind and update them about the study, and, following their confirmation of the schools' participation, arrange a convenient time for the administration of the survey. As anticipated, in most schools the principals had communicated the nature of the study to either the Grade 1 co-ordinators or the teachers themselves. In other schools, following the approval of the principal, I was introduced to a senior teacher or grade co-ordinator and asked to describe the study and its intent. In

schools where the principal and teachers were willing to participate in the study, subsequent arrangements were made for administering the survey instrument at a convenient time and date. All Grade 1 teachers in each selected school received a package containing a letter inviting them to participate (see Appendix D), a consent form (see Appendix E), and a copy of the questionnaire (see Appendix F).

A sample size of approximately 200 Grade 1 teachers was to be used, based on Sudman's suggested minimum requirement for survey research (cited in Gall, Borg, & Gall, 1996, p. 229). Generally, each school had a cluster of 1 to 6 Grade 1 teachers and their respective classes.

Interview

As indicated above, accompanying each survey instrument was a letter of invitation and a consent form. The letter of invitation requested the teachers to complete the teacher's questionnaire and, if they were willing to participate further in this study, to complete the Consent for Follow-on Form. From those willing to continue onto phase 2 of the study, a purposeful sample of 20 teachers was selected to be interviewed. Each of these teachers was assured of confidentiality, and given the option to discontinue without prejudice or penalty.

Validation Panel

A teacher educator, three of the teachers who participated in this study, and a graduate student in the Department of Elementary Education, University of Alberta were asked to participate, on separate occasions, in validating and confirming the findings derived from responses to the survey questionnaires. Additionally, each of the 20 teachers who participated further in the interviews confirmed the findings on his or her survey questionnaire.

Development of Research Instruments

Survey Questionnaire

The purpose of the survey instrument was to obtain data and information from the sample of teachers to (a) provide a profile of Grade 1 teachers in a large urban area of Jamaica; (b) describe the context within which these teachers are practitioners; (c) identify Grade 1 teachers' understandings of assessment; (d) identify and describe the

assessment practices of these teachers; (e) indicate the kinds of information and decisions which result from these Grade 1 teachers' assessment practices; (f) identify factors which influence Grade 1 teachers as they assess, with particular attention given to the influence of the course Classroom Testing and Measurement (CTM); and (g) describe the influence of the GRI on Grade 1 teachers' instruction and assessment practices.

The instrument comprised six sections, as shown in Table 1. In the first section, demographic data was sought to give a description of the Grade 1 teachers. Information on Grade 1 teachers' daily classroom activities was obtained in the second section. In section 3 information about Grade 1 teachers' understandings of assessment, and the types and uses of assessment strategies employed by these teachers was gathered.

Table 1

Sections of Survey Questionnaire

I Demographics	II Daily Grade 1 classroom activities	III Assessment strategies	IV Teachers' use of assessment information	V Assessment and testing	VI GRI and factors that influence assessment practices
School: name, type, enrolment	Routine: use of timetable	Meaning of assessment	Assessment information: type, recording, reporting,	Assessment and Testing: distinctions, strengths, reservations	GRI: administration, uses
Class: size, age and gender of pupils	Teaching methods: variety, usefulness	Assessment stategies: types, uses, frequency			Factors that influence assessment practices: experience, teacher-preparation, inservice workshops, CTM
Teacher: age range, gender, teaching experience, training, professional qualifications	Lesson-planning: frequency, participants, submission				
					Additional comments about assessment practices

In the fourth section, details about how teachers made use of the information which resulted from their assessment strategies were collected. Information on what Grade 1 teachers saw as the distinctions between assessment and testing was gathered in section 5. In the final section, details about the GRI and how these teachers' assessment practices were influenced by factors such as the CTM course were collected. The items consisted of a range of closed, open-ended, and partially open-ended formats (Goodwin & Goodwin 1996; Patton, 1990).

Pilot Study

Prior to conducting the main survey, the survey instrument was administered to a pilot sample of five Grade 1 teachers from an all-age school in the Corporate Area. These teachers were purposefully selected from the target population.

Following the completion of the questionnaire, each respondent was requested to provide feedback on the structure and language of the items, the order in which the items were presented, and on whether or not additional items were needed or some of the items were redundant. Using this information, modifications were made to the instrument. The adjusted questionnaire was then verified by a member of my supervisory committee prior to administration. A copy of the final revised questionnaire is provided in Appendix F.

Interview

The interview used in this study was semi-structured and informal (see Appendix G). The purpose of the interview was to investigate more fully the experiences, concerns, and practices of teacher-respondents as they assessed their pupils in Grade 1 (Berg, 1998; Seidman, 1991). More specifically, the purpose of the interview was to obtain deeper information, clarifications, and elaboration from the participants on their responses to the questionnaire (Goodwin & Goodwin, 1996). For those teachers who agreed to participate further, responses to and results from the survey questionnaire were used as a "spring board" to stimulate recall for the interview.

As shown in Table 2, questions on the interview schedule were categorized as essential, probing, extra, and throw-away (Berg, 2001; Berg, 1998). Essential questions were those that elicited research-specific information. Questions which were probing drew out more detailed and complete responses. Extra questions were those which were "roughly equivalent to certain essential ones but worded slightly differently" (Berg, 2001,

Table 2

Categories of Questions on Semi-structured Interview Schedule

Category	Questions on interview schedule
Essential	• What are your current views of assessment and its role in the classroom?
	• In addition to your response on the questionnaire, can you say a little more on your understanding of assessment?
	• In your role as a teacher, what do you assess and how do you go about it?
	• How do you view the role of tests and testing in the Grade 1 class?
	• To what extent do you use a variety of assessment strategies in your teaching?
	• Which assessment strategy have you found most useful? In what ways did you find it useful? (Probe)
	• Which assessment strategy have you found least useful? Why? (Probe)
	• What kinds of information do you gain from assessing your pupils?
	• How do you make use of the information gained from assessment?
	• Tell me about the teacher's role in assessing her/his pupils' performance. (Extra)
	• In what ways is what you do in the classroom affected or influenced by the information gained from the different forms of assessment? (Extra)
	• To what extent do you make use of the GRI?
Probing	• Tell me about some of the factors which may have influenced your views of assessment in the classroom. (Extra)
	• How do you record the information gathered from your various assessment strategies?
	• Can you give me some examples of the information you get from assessing your pupils? (Extra)
	• In what ways are you satisfied with the assessment strategies that you use?
	• Why, or why not?
	• What has influenced you in how you assess your pupils?
	• How have you found the CTM course useful?
	• What are the advantages and concerns you have about the GRI?
	• Tell me about the assessment requirements at this school?
	• Is there anything that you would like to say about assessment or the strategies used for assessment, and the purpose they serve? (Extra)
Throw-away	• Tell me a little about your experiences as a teacher in Jamaica.
	• Share a memorable experience of teaching Grade 1 with me.
	• What do you know about the NAP?

p. 75). Throw-away questions helped to develop rapport and provide a context appropriate for the interview. A copy of the interview schedule is provided in Appendix G.

Pilot Interview

The initial draft of the interview schedule was used to interview a Jamaican-trained teacher. While this teacher had had teaching experience in a Jamaican primary school, at the time of the pilot study, she was residing in Edmonton, Canada. Her teaching experience in Jamaica included Infants (under 5 year-olds) and a mixed group of first through fourth grade pupils in a Special Education class.

The interview began with a description of the proposed study and the specific foci of the interview. The participant's questions and concerns about the proposed study were answered, clarified and discussed. During the interview, many of the interviewee's responses led to additional questions and probes which sought clarification and elaboration. Further, the results of this interview identified the need to adapt the wording of the questions to a language understood by the respondents. Due to the conversant nature of the semi-structured, face-to-face interview for the study, questions and responses were frequently interspersed with exchanges in Jamaican Creole.

Field Notes

Throughout the duration of data collection, my own reflections, observations, concerns and questions were recorded in the form of field notes. Recorded information, and "interview elaborations" (McMillan & Schumacher, 1993) included notes and comments about observations of responses and interviewees' reactions during the interviews, concerns held by both informants and myself, and my plans and reflections. Recording field notes facilitated complementarity of data collection, analysis, and the literature.

Several researchers have offered numerous guidelines and suggestions for effective use of field notes in research (Berg, 1998; Bogdan & Biklen, 1992; Smith & Glass, 1987; Bradburn, Sudman, et al., 1979; Hyman, 1960). In the present study the field notes were descriptive and reflective in nature (Bogdan & Biklen, 1992, pp. 120-123), and included information like that summarized in Table 3.

Table 3

Categories of Information for Field Notes

Descriptive	Reflective
Portrait of the interviewees	Reflections for analysis—possible themes and patterns emerging
Reconstruction of interview	Reflections on method—improvements to the design, do's and don'ts for interviews following
Description of the setting/context	Reflections on ethical matters, and issues related to the respondent and interviewer
Description of events, activities, or behaviours that may have influenced interviews	Points of clarification and concern

Data Collection

Before data collection began, letters of introduction and a brief description of the purposes and procedure of the study were sent to the Permanent Secretary, and the Director of Region One (Kingston & St. Andrew) at the Ministry of Education, Youth and Culture (see Appendices H & I), as well as the Principals of all 66 schools selected in the sample. It was necessary to pay a "courtesy call" at the office of the Director of Region One, to provide details of the study, and respond to questions and concerns about the study. Upon receipt of the Ministry's endorsement, contact was made with each principal. Subsequent arrangements for gaining entry into the schools were negotiated with principals, senior teachers, or grade co-ordinators.

The data for the study were gathered in two consecutive phases. During the first phase the survey questionnaires were administered. During the second phase, the volunteer participants were interviewed, and the validation panel confirmed the findings of the survey instruments. Also during this latter phase, verification of the interview transcriptions and summaries was obtained from the interviewees. Clarifications were

sought, and the teachers elaborated where necessary. Data collection extended across a one-year period, from May, 1998 to May, 1999.

Phase 1

Four research assistants and I administered the survey questionnaires in phase 1 of the study. One of the research assistants was a graduate student in the area of educational measurement at the University of Alberta and was in Jamaica at the time of the study. The other research assistants, teacher educators from a Teachers' College in Jamaica, assisted when their teaching time allowed. Before data collection began, there were two orientation meetings when the research assistants were familiarized with the purpose and nature of the study, and the procedures for administering the instrument. On both occasions, I responded to their queries and concerns about the study, and we equipped ourselves with answers to the kinds of questions we anticipated from the teachers.

As indicated before, when selecting the sample of schools for this study, consideration was given to geographic representation and accessibility. Where possible, arrangements were made for administering the instruments according to school clusters in particular geographic locations.

In most of the schools, contact was made by telephone. Where this was not possible, it was necessary for me to go into the schools and make the arrangements for administration of the instruments in person. A considerable amount of time was required for contacting the schools, scheduling a time for going into each school, and confirming the arrangements made with each contact person. Initially, for most of the schools, such preliminary arrangements were made during May, and administration of the survey was conducted throughout June. As phase 1 of data collection proceeded, arrangements for administering the questionnaire, and the actual administration of the instruments were conducted simultaneously. The teachers were accommodating at that time as they were "getting to the end of the syllabus and the school year" and were revising and preparing for year-end tests. In several other schools, the teachers requested that I administer the instrument "after the beginning of the new school year." Similar to the beginning of phase 1 in May, I contacted the remaining schools in the sample two weeks after commencement of the new academic year in September, 1998. Administration of the questionnaire was completed in December, 1998.

The survey instrument was administered by either a research assistant or myself, or both, to all the Grade 1 teachers in the sample schools. Each teacher was given a package containing a questionnaire, a letter of invitation to complete the survey, and a consent form for further participation in the study. Administration of the questionnaire varied among the schools, and depended on the recommendation of each principal or senior teacher. In some schools, the instrument was administered to individual teachers, while in others, it was administered to all Grade 1 teachers in one sitting. Administration was generally conducted in a staff room or in a room made available. Arrangements were made for the teachers' classes to be supervised by neighbouring class teachers or students from senior classes. In five schools, either a research assistant or I would supervise the teacher's class while the teacher responded to the instrument. In most of the schools, the purpose and nature of the research were described to the Grade 1 teachers by a research assistant or myself, who assured the teachers of confidentiality and anonymity before they responded to the questionnaire. In 23 of the schools where the teachers preferred to have the instruments overnight, or where it was not possible to schedule a time for administering the instrument during the school day, the principal or contact teacher assumed responsibility to explain the purpose and nature of the study and distribute the research packages.

All the teachers were given the option of withdrawing from participation in the study. All queries and concerns were discussed and answered. The teachers then completed the instrument individually. The research assistants or I then collected the completed instruments and consent forms. A research package was left with either a teacher or the principal for any Grade 1 teacher who was absent, and arrangements were made for a subsequent collection.

Phase 2

Phase 2 ran from January, 1999 to early May of the same year. During this phase, 11 teachers were purposefully selected from the teachers who responded to the survey and agreed to participate further in the study. However, while arrangements were being made for each individual interview, three of the teachers expressed their preference for interviews with the other Grade 1 teachers at their school. Altogether, there were 11 interviews. I interviewed eight of the teachers separately, while 12 teachers were

interviewed in focus groups of 3, 4, and 5 members respectively. Each interview was arranged at a time and place convenient for the teachers. Eight interviews were conducted at the schools where the teachers taught, and the remaining three took place at a location away from each teacher's school site. Each interview was between 45 to 90 minutes. Two of the interviews, one with an individual teacher and the other with a focus group, were completed in two parts. To facilitate discussion and recall, all interview sessions were audio-taped. Each interview was transcribed as soon as possible. A copy of the transcription and a summary was given to each of the eight teachers who were interviewed separately and to the members of each of the three focus groups. Explanations and clarifications were sought, and the teachers elaborated where they thought it necessary to do so.

Validation Panel

Three of the teachers who participated in this study, a teacher educator, and a graduate student in the department of elementary education of the University of Alberta participated, on separate occasions, in validating and confirming the findings derived from responses to the survey questionnaires. Each of the three teachers received 20 randomly selected questionnaires and a copy of the summarized findings. The teachers validated the findings by confirming their representation of the responses to the questionnaires. I also met with the teacher educator, and we both verified and confirmed the findings resulting from the responses to the survey questionnaires. Following my return to Edmonton to conduct an analysis of the data, the graduate student and I repeated the procedure of verifying and confirming the findings from all responses to the survey questionnaires.

Data Analysis

Survey

Analysis of data from the survey questionnaire began as soon as the instruments were collated and compiled. Data were entered into a computer directly from the instruments. A random sample of 25% of the data records was selected for verification. Dual entry of the data was done independently, and both Excel and SPSS (statistical software) were used to compare the files line by line. In this way, all errors were

corrected. Frequencies and proportions were computed for each question to obtain a description of the sample of respondents and the use of assessment strategies by the respondents. After examination of the demographic characteristics of the sample, contingency table analyses were conducted for those variables for which there was at least 10 teachers in each of the categories for that variable. These analyses allowed for comparisons of sub-groups, for example, different age groups of teachers.

Content analysis was used to summarize open-ended responses (Berg, 1998). A coding frame of cluster themes (Miles & Huberman, 1994) was used to organize segments of data which related to particular research questions. The graduate student was sent the summarized findings for confirmation of representation of the survey responses.

Interview

Each audio-taped interview was transcribed within three days afterwards. The transcript was returned to each respective teacher for confirmation. Changes and elaborations were added where needed. The revised transcribed interviews were then systematically and rigorously analyzed.

Initial use of open coding, through an inductive approach, allowed themes and common findings to emerge from the data across each interview. These commonalties were organized and identified through the use of coding frames. A resulting multilevel process of reiterative sorting, guided by the research questions, resulted in more specified forms of axial coding (Berg, 1998; Strauss, 1987). Through axial coding, the collapsed data was further refined by a process of analytic induction (Glaser & Strauss, 1967).

Trustworthiness of the Data

The variety of data collection devices, including the survey questionnaire, interviews, and field notes, allowed for the use of triangulation, which enhanced the credibility and validity of the data and subsequent findings. Following Phase 1, content analysis was used to summarize the open-ended questionnaire responses. The three teachers who agreed to participate further, and who had themselves completed the questionnaires, helped to authenticate the resulting themes from all participants' responses.

During Phase 2, member checking was exercised, as the teachers who were interviewed were able to view the transcripts of their interviews, and make any necessary

changes. An interview summary was prepared and sent to each of the teachers for comment. It was hoped that the professional credibility of the researcher was established through collaboration with and approval of the Ministry of Education, Youth, and Culture in Jamaica.

The use of volunteer participants may have led to bias in the results (Gall, Borg, & Gall, 1996; and Cook & Campbell, 1979). On the matter of the decision to conduct this study using a combined methodology, the literature revealed a continued debate on the advantages and disadvantages of each paradigm. The purpose of this study was not to enter the debate in defence of either paradigm, but rather to select the most appropriate and pragmatic methods which would generate knowledge in response to the research questions of this study (Goodwin & Goodwin, 1996).

Ethical Considerations

I informed all participants of the purpose of this study, and how the resulting data were to be used. Any concerns and questions expressed by the participants pertaining to the research were clarified and answered. The participants completed a consent form (see Appendix E) before participating beyond responding to the questionnaire for this research. They were able to withdraw at any time without penalty. All survey and interview respondents were guaranteed confidentiality, and protection of their identity. Pseudonyms were used where reference was made to individual students. Audio-tapes and transcription of interviews will be destroyed by the end of five years after this study has been completed. I am not aware of any potential harm that may result from participating in this study. I consulted with my Supervisor, and when necessary, other members of my Supervisory Committee on matters which required ethical consideration. All activities related to, and resulting from this research have satisfied the requirements of the Research and Ethics Committee of the Department of Elementary Education at the University of Alberta, and the Ministry of Education and Culture in Jamaica.

The Role of the Researcher

Possible biases introduced through the role of the researcher in this study was perhaps most evident in my interpretations of the qualitative information provided by the participants. The open-ended nature of the questions in sections of the survey questionnaire and throughout the interview schedule required interpretive application on

my part as researcher. Such an interpretive undertaking involved the understanding that the stated "objects, people, situations, and events do not in themselves possess meaning. Meaning is conferred on these elements by and through human interaction" (Berg, 2001, p. 9). My role as researcher required an ongoing and negotiated interpretation of what the teachers wrote and said and my construction of meanings resulting from the interactions (Bogdan & Biklen, 1992). In so doing, it was necessary for me to either "enter into the defining process or develop a sufficient appreciation for the process so that understandings can become clear" (Berg, 2001, p. 9).

In order to establish credibility of my findings and interpretations, internal validity or trustworthiness was achieved through a number of verification procedures as recommended by Glesne and Peshkin (1992):

1. triangulation—through the use of multiple data collection methods and multiple sources,

2. peer review and debriefing—through external reflection and input by graduate students and teacher educator,

3. clarification of researcher bias—reflection upon my own subjectivity,

4. member checking—confirmation of transcripts and summaries by research participants to make sure that I have represented them and their information accurately, and

5. external audit—outside persons to examine the research process and product through "auditing" data entry, summaries, analytic coding scheme, and findings.

In conducting qualitative inquiry, I recognized that by its "open nature" I acquired more data than originally anticipated. Furthermore, in analyzing the open-ended questions on the survey, and in conducting and analyzing the interview data, there was always the possibility of influence by my own biases. It should be acknowledged that I do have concerns about the amount of testing that is done in Jamaica's school system, in particular, in the early grades. Although I was aware of that, it may have encroached on my interpretation of the data. This process, which involved much judgment making on my part, was pointed out by Strauss and Corbin (1997) as follows: "For the research

interpretations, actors' own words and interpretations are necessary, respected, but recast in new and analytic terms" (p. 64).

CHAPTER 4
ANALYSIS OF DATA—SURVEY INSTRUMENT

Introduction

The results presented in this chapter were obtained from an analysis of the responses to the survey questionnaire. The presentation is divided into eight sections. In the first section, a demographic description of the schools and classes included in the sample is provided. This is followed by a description of the Grade 1 teachers in this sample of schools. In the third section, information is provided on the teachers' classroom routines. This is followed by a section on what teachers understand by assessment and testing. In the fifth section, a report on the teachers' assessment practices is provided. Each teacher was asked to list the assessment strategies which were used with his or her class, give reasons for using the different strategies, and indicate the frequency of the assessment methods used. The sixth section shows how this information was used by teachers to prepare report cards on their pupils and to enter comments on pupils' cumulative records. This is followed by an account of the uses made by Grade 1 teachers of the Grade 1 Readiness Inventory (GRI). In the final section, an outline is provided of the factors which influenced the assessments conducted by the teachers, followed by a series of recommendations for improving the assessment practices of Grade 1 teachers.

Description of Schools

Response Rates

Before proceeding with the description of schools, the rate of response at the school and teacher levels is provided. The study was conducted in Region 1, which includes Kingston and St. Andrew (see Chapter 3). There was a total of 104 schools with at least one Grade 1 class in this region according to the Directory of Public Schools published by the Ministry of Education, Youth, and Culture (1997/1998). The schools were classified according to the following types; primary, primary and infant, all age, all age and infant, and primary and junior high. Of the 104 schools, 66 were selected for this study. In selecting these schools, geographic representation and accessibility were the foremost considerations. Initial contact with the 66 schools was made either by telephone

40

or school visit. During this process, one of the primary schools identified in the sample was found to be closed due to political violence in the immediate surrounding community. Thus the total number of schools in the sample was 65.

Of the 65 schools, principals in 61 (93.8%) responded favourably. Two principals declined participation, citing as their reasons a "lack of available time" and an "overstressed teaching staff." Although initial contact was made in the other two schools, one by telephone and the other in person, difficulties were encountered in completing the necessary arrangements. In one case, the contact senior teacher went on emergency leave. There was no other member of staff, at the time of this research, available to take the place of this contact teacher. In the second case, a shift school, several attempts by telephone were made to contact the Grade 1 teacher with whom initial arrangements were made in person. However, after the teacher was scheduled to teach during the afternoon shift, attempts to contact her proved futile.

As described in Chapter 3, administration of the survey instruments was to have been completed by either the researcher or research assistants at a prearranged time and date convenient for the teachers and schools. However, teachers in 23 of the schools were not able to meet to do so. In these cases, the instruments were left with them, and arrangements were made for their collection at an appointed date and time. In the remaining schools, where possible, the researcher or research assistant met with all Grade 1 teachers and the Grade 1 co-ordinator or senior teacher in order to skim the instrument for explanation or clarification. In all of the schools, especially those where such a meeting was not possible, teachers were encouraged to telephone the researcher in the event that there were queries or concerns regarding the study and, more specifically, the survey items.

In the 61 co-operating schools, 181 instruments were distributed to the Grade 1 teachers who were willing to respond to the survey. Of the 181 instruments, 140 (77.3%) were completed and collected from 47 (77.0%) of the 61 schools. There were 14 schools from which instruments were not obtained. In each case, the schools were among the 23 in which the survey was not administered by the researcher or research assistants. Several attempts were made to either collect completed instruments or contact these 14 schools. Eventual failure to do so was attributed to the following reasons: teachers in 5 schools

had no time to complete the surveys, loss or misplacement of instruments took place at 2 schools, the contact-teacher was unable to collect the questionnaires in 4 schools, and there was a breakdown in communication between the researcher and school contacts in 3 schools.

The final sample of teachers is summarized in Table 4. As shown, the primary and primary and infant schools are oversampled, and all age and all age and infant schools are undersampled in both the initially selected sample, the sample where expressions to co-operate were received, and in the collected and completed sample.

Table 4

Distribution of School Population and Sample by Type of School

School type	Target population of schools (n=103)		Sample (n=65)		Willing to co-operate (n=61)		Collected & completed (n=47)	
	f	%	f	%	f	%	f	%
Primary (Grades 1 to 6)	46	44.7	37	56.9	35	57.4	26	55.3
Primary & infant (4 year-olds to Grade 6)	7	6.8	7	10.8	7	11.5	7	14.9
All Age (Grades 1 to 9)	33	32.0	12	18.5	11	18.0	8	17.0
All age & infant (4 year-olds to Grade 9)	10	9.7	5	7.7	4	6.6	3	6.4
Primary & junior high (Grades 1 to 9)	7	6.8	4	6.2	4	6.6	3	6.4

School Characteristics

Geographical distribution. The primary schools were predominantly located in Kingston and were, therefore, quite accessible. All age schools were more common in St. Andrew. In contrast to Kingston, in St. Andrew, which is marked by mountainous terrain and is more sparsely populated, the schools were somewhat inaccessible. Further, many did not have telephones. Therefore, the all age schools were undersampled and the primary schools were oversampled. The geographical distribution of the 65 schools

initially selected is shown in Figure 1. An "x" represents schools from which completed survey questionnaires were collected (n=47). The open circles, "o," represent schools from which no surveys were collected (n=14); and "n" indicates each of the nonparticipating schools (n=5, including the one which was closed due to political violence).

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Figure 1. Geographic distribution of schools showing the sample (n=65) of schools identified for this study which was conducted in Region 1 (Kingston and St. Andrew; adapted from The Gleaner Company, 1995).

School enrollment. The characteristics of the schools sampled are summarized in Table 5. Among the 47 participating schools, the average enrollment was 1,267.5. Smaller schools, which were located in the St. Andrew hills, had as few as 153 children enrolled, and schools found in more urban and densely populated areas had as many as 2,350 children on roll.

The number of Grade 1 classes in a school varied from one to six. Eight schools operated with one Grade 1 class, 11 schools had 2 Grade 1 classes, and 6 others had 3 classes. In 11 schools there were four Grade 1 classes; five classes were in eight of the schools; and, finally, three schools had six Grade 1 classes.

Table 5

School/Class Characteristics (n_s=47)

School/class characteristics	Mean	Minimum	Maximum
School enrollment	1267.5	153	2350
No. pupils in each Grade 1 class	45.5	12	64
Pupil age	6.4	6	7
Pupil gender - boys	23	7	47
Pupil gender - girls	23	5	43

Class Characteristics

Class size. The average number of pupils in each Grade 1 class was 45.5. Classes in more urban schools had larger numbers, ranging between 50 and 64 pupils, while class size ranged from 12 to 46 in the suburban areas. Not unlike the teacher-pupil ratio of 1:43 recorded for 1986-87 (Miller, 1994), the modal ratio of 1:45 "masks wide variation in class size" (p. 145) across schools in different locations within Region 1. The MOEY&C (1996-97) regulation for primary grades sets a maximum of 55 pupils per teacher in each class. However, the regulation class-size for pupils at the early childhood level stands at 45 (MOEY&C, 1996-97). Grade 1 is classified as both an early childhood class and a primary grade, so principals are at liberty to have class sizes between 45 and 55 for Grade 1.

Age and gender. The pupils were either six or seven years of age; the average age was 6.4 years. The average numbers in boys and girls were equal at 23. The number of boys ranged from 7 to 47, and the number of girls ranged from 5 to 43.

Teacher Characteristics

The characteristics of the 140 teachers who completed and returned the questionnaires are reported in Table 6.

Distribution of teachers by school type. The distribution of teachers by school type is similar to the distribution of schools by school type (cf. Table 4). The largest number of teachers, 84 (60.0%), were in primary schools. A nearly equal number, 19 (13.6%) and 18 (13.4%), were in primary and infant and all age schools, respectively. Thirteen (9.3%) teachers taught in all age and infant schools, and the remaining six (4.3%) taught in primary and junior high schools.

Gender and age. As shown in Table 6, of the 140 Grade 1 teachers who responded to the questionnaire, 137 (97.9%) were female. The modal age groups were 36-40 and 41-45 years of age. Nearly half (n=64; 47.7%) of the teachers were in these two age groups. Slightly less than a third (n=43; 32.0%) were less than 36 years of age. Of this younger group, all but 10 (out of 43) were 26-35. Of the remaining 20% of the teachers, slightly more than half (n=16; 11.9%) were between 46 and 50 years of age.

Grades taught. All but one of the teachers had teaching experience at Grade 1. The one teacher who had not taught Grade 1 before was a senior teacher filling in for the regular Grade 1 teacher who was on sick leave. The next two most popular grades taught by the teachers were Grade 2 (n=74; 52.9%) and Grade 3 (n=65; 46.4%). The number of teachers with teaching experience in Grade 4 and beyond descended from 52 to 35.

Lastly, at the other end of the grade spectrum, 30 of the teachers had experience in teaching infants. This lower number is explained by the small number of schools with infants (see school type distribution, Table 6). Many four- and five-year-olds attend basic schools before entering the official primary educational system at Grade 1.

Table 6

Teacher Characteristics - Distribution, Gender, Age, Grades Taught

Characteristic	f	%
School type distribution (n_t=140)		
Primary	84	60.0
Primary & infant	19	13.6
All Age	18	12.9
All age & infant	13	9.3
Primary & junior high	6	4.3
Gender (n_t=140)		
Female	137	97.9
Male	3	2.1
Age (n_t=134)		
< 20	1	0.7
21 - 25	9	6.7
26 - 30	15	11.2
31 - 35	18	13.4
36 - 40	31	23.1
41 - 45	33	24.6
46 - 50	16	11.9
51 - 55	8	6.0
56 - 60	2	1.5
> 60	1	0.7
Grades taught (n_t=140)		
Infants (4- and 5-year-olds)	30	21.4
Grade 1	139	99.3
Grade 2	74	52.9
Grade 3	65	46.4
Grade 4	52	37.1
Grade 5	47	33.6
Grade 6	41	29.3
Grades higher than 6	35	25.0

Education

Professional qualification. Pretrained teachers are teachers who have completed several years of high school education and who, subject to Regulation 46 (The Education Act, 1995), must complete the requirements for the Diploma in Teaching programme normally within six years of beginning to teach. However, should a pretrained teacher be engaged in pursuing studies towards obtaining the qualifications for entering teachers' college, an extension beyond the six-year period can be negotiated (Regulation 50, The Education Act, 1995). Trained teachers are teachers who have completed a teacher preparation programme and hold a certificate or diploma awarded by a teachers' college, college of education, or other recognized institution offering professional training for teachers (Schedule A, Regulation 43, The Education Act, 1995). They may also hold a Bachelor's Degree in education or its equivalent awarded by a university or institution recognized by the Ministry of Education (Schedule A, Regulation 43, The Education Act, 1995).

Table 7 contains information about the educational qualifications of the Grade 1 teachers who responded to the survey questionnaire. As shown, 87 (62.1%) of the teachers possessed a Diploma in Teaching, 17 (12.1%) held a Certificate in Teaching, and 12 (8.6%) possessed a Bachelor's degree. The remaining 19 (13.6%) teachers were pretrained.

Beginning in 1981, the programme leading to the Diploma in Teaching was phased in over a three-year period to replace the programme leading to the Certificate in Teaching (Miller, 1995). By June 1984, the Certificate programme was entirely phased out. Teachers were encouraged to upgrade themselves by acquiring a diploma and were offered incentives including paid study leave and an increased salary package. To add to the incentives, it was possible for the teachers to do the Upgrading Programme on a full-time or part-time basis, during their vacation, through distance learning, or combinations thereof (Miller, 1995). The initiative was made available to Certificate teachers in the school system between 1984 and 1996 (Miller, 1995). Fifty-one (36.4%) of the teachers in this study had taken advantage of this upgrading programme. There were 88 (62.9%) who had not done so. All of the teachers whose date of college attendance was between

Table 7

Teachers - Education

Professional qualification (nₜ=135)	f	%
Pre-trained	19	13.6
Certificate in teaching	17	12.1
Diploma in teaching	87	62.1
Bachelor's degree	12	8.6
Upgrading programme (nₜ=139)		
Yes	51	36.4
No	88	62.9
Programme specialization (nₜ=135)		
Early childhood education	20	14.3
Primary education	112	80.0
Secondary education	3	2.1
Institutions attended (nₜ=136)		
Mico T.C.	52	37.1
St. Joseph's T.C.	42	30.0
Shortwood T.C.	28	20.0
Moneague T.C.	6	4.3
West Indies College	3	2.1
Bethlehem T.C.	1	0.7
Other	1	0.7
University of the West Indies	12	8.8
Presently in attendance	14	10.3
Additional studies		
Yes	32	22.9
No	106	75.7
Course in CTM		
Yes	116	82.9
No	23	16.4

Note. Generally, a Bachelor's degree in arts, education, or science would have been completed locally at the University of the West Indies.

1982 and 1999 would comprise a major part of the 88 teachers who had not pursued the Diploma Upgrading Programme.

Of the 12 teachers who had completed a Bachelor's degree, eight held a degree in the arts, three in education, and one in science. Of the 19 pretrained teachers in the sample, 15 were studying part-time, as was the requirement. Fourteen (10.8%) of the teachers were, at the time of this study, in attendance at a teachers' college either completing part-time studies or awaiting final-year examination results. Three teachers were engaged in completing degree programmes. One teacher was reading for a Master of Arts degree, and the remaining two were enrolled in a Bachelor's Degree in Education programme with specialization in early childhood education.

Programme specialization. As shown in Table 7, the majority (n=112; 80.0%) of the Grade 1 teachers had completed their teacher training programme with a specialization in primary education. Twenty (14.3%) teachers had specialized in early childhood education and three (2.1%) had a specialization in secondary education.

In addition to their initial professional area of specialization, 32 (22.9%) teachers indicated that they had completed studies in other areas (Table 7). These areas included business management, nutritional management, guidance and counseling, library studies, special education, computer studies, general catering, family life education, music, and school administration.

Institutions attended. The majority of the teachers who participated in this study were graduates of Mico T.C. (n=52; 37.1%), St. Joseph's T.C. (n=42; 30.0%), or Shortwood T.C. (n=28; 20.0%). These three teachers' colleges are located in Region 1, where the research was conducted. Up to the time of this research, all three teachers' colleges offered a programme in primary education, whereas a programme in early childhood education was available in only two of these colleges, St. Joseph's and Shortwood.

Course in CTM. Among the 139 Grade 1 teachers who indicated whether or not they had completed a course in Classroom Testing and Measurement, 116 (82.9%) said they had done so. This number would include all the teachers who had attained a Diploma in Teaching. Teachers who held a Certificate in Teaching and had not yet

completed the Upgrading Programme, along with pretrained teachers comprised the 23 (16.4%) teachers who had not completed a testing and measurement course.

Teachers in the Classroom

The teachers were asked to describe their classroom routines. In this section, an account of the teachers' routines, such as timetabling and lesson planning, is provided. This is followed by a description of teachers' preferences in their method of teaching.

Timetables and lesson plans. Under Regulation 44, Schedule D, of the Education Act (1995), the duties and responsibilities of a principal of a public educational institution include "formulating, in consultation with members of staff, the curriculum, syllabus and time-table of the institution, within the general educational policy laid down by the Minister and by the Board" (p. 58). The majority of Grade 1 teachers (n=114; 81.4%) indicated that they used a timetable in their teaching (see Table 8). Thirteen (9.3%) said they followed a timetable sometimes, and 12 (8.6%) said they never used one. Further, many of the Grade 1 teachers who used a timetable explained that it was not "adhered to slavishly" to allow for times of spontaneity, special occasions, and other necessary changes to the daily routine. Timetables were particularly used when specialist teachers were scheduled for classes in subjects such as music, physical education, drama, and religious education.

Regulation 44 of The Education Act (1995) states that the duties of a teacher should include "developing lesson plans on a regular basis" (p. 27). Ninety (64.3%) teachers indicated that they carried out this task on a weekly basis (see Table 8), and an additional 46 (32.9%) teachers wrote their plans fortnightly. Only two (1.4%) teachers prepared their lesson plans daily.

Generally, teachers developed their lesson plans either on their own (n=69; 49.3%) or with all the other Grade 1 teachers in their school (n=59; 42.1%). Of the remaining 10 teachers who responded to this question, four (2.9%) planned their lessons with some, but not all of the Grade 1 teachers in the school, and six (4.3%) teachers developed their lesson plans according to some combination of the three previous procedures. As an example of the latter practice, one teacher, after discussing the week's programme with all other Grade 1 teachers, completed the final written plan on her own.

Table 8

Classroom Routines - Timetables and Lesson Plans

Element	f	%
Follows a timetable		
Yes	114	81.4
No	12	8.6
Sometimes	13	9.3
Lesson plans done		
Daily	2	1.4
Weekly	90	64.3
Fortnightly	46	32.9
Other	1	0.7
Lesson plans done by		
Self	69	49.3
Several teachers in the grade	4	2.9
All teachers in the grade	59	42.1
More than one of above	6	4.3
Lesson plans submitted to		
Principal	41	29.3
Head of section	19	13.6
Senior teacher/grade co-ordinator/vice principal	62	44.3
More than one of above	17	12.1

On completing the lesson plans, teachers are required to submit them to their principal, vice principal, or any teacher "holding a post of special responsibility in a public educational institution" (e.g., to a head of department or section, grade co-ordinator, or senior teacher; Schedule D, Education Regulation 44, The Education Act, 1995, p. 57). Of the 140 teachers, 62 (44.3%) submitted their plans to a senior teacher, grade co-ordinator, or the vice principal, and 41 (29.3%) submitted their plans to

their principals. Nineteen (13.6%) teachers reported that they submitted their plans to the head of section/department, and the remaining 17 (12.1%) teachers submitted theirs to more than one individual.

Teaching methods. Of the 140 teachers, 134 responded to the question in which they were asked to indicate the teaching methods they found most useful. A content analysis of their responses yielded five major categories. At least 10% of the teachers indicated that they used each of these methods. The sixth category, other, shown in Table 9, includes teaching methods identified by fewer than 10% of the teachers. These are identified in Table 9, together with the number of teachers who mentioned each method included in a category. Because most of the teachers used more than one method, the total frequency exceeds 134.

Table 9

Most Useful Teaching Methods

Method of teaching	f (n=134)	%
Activities that require active pupil participation	118	88.0
Oral-auditory activities	88	65.7
Audio-visual activities	64	47.8
Reading & writing activities	15	11.0
Outdoor activities	14	10.4
Other	16	11.9

As shown, the most useful method of teaching included activities that required active pupil participation (n=118; 88.0%). These activities required that children do something that involved more than using sight and hearing. Included in this category were activities such as using concrete objects; free activity and interest/learning corners; guided discoveries; direct experience; dramatization; finger play; games; hands-on experiences; look, say, and touch method; counting, measuring, and matching things/objects; practical work; imitation, miming, and role playing; experiments; self-discovery; co-operative group learning; and play and learn.

The next most useful teaching methods were oral-auditory activities (n=88; 65.7%). These activities included brainstorming, songs and singing, discussions, drill, repetition, explanation, free talk, listening and speaking, controlled talk, oral communication, oral work, phonics activities, questioning, rhymes, jingles, poems, syllabication, and story-telling.

The third class of most useful methods included audio-visual activities (n=64; 47.8%). Among these were art work, visual demonstration, display, drawing, illustration, look and say, matching, mobiles, observation, picture clues, pictures, audio-visual aids, use of charts, peep show, and diorama.

The next two methods, outdoor activities (n=14; 10.4%) and reading and writing activities (n=15; 11%), were found useful by a much smaller percentage of teachers. Approximately 1 in 10 teachers indicated that they found these methods useful (cf. nearly 5 in 10 for the next highest frequency [audio-visual activities]). Outdoor activities included excursions, field trips, nature walk, nature tour, and rambles. Reading and writing activities comprised using the chalkboard, textbook exercise, using workbooks or worksheets, written exercises, chalk and talk, reading-teaching, and using individual texts, quizzes, and tests.

Teachers' Understanding of Assessment and Testing

The teachers responded to a number of items about their understanding of assessment, the strengths of and reservations about assessment, the relationship between assessment and testing, and the strengths and reservations held in regard to testing. For many of the items related to their understanding of assessment and testing, the teachers provided more than one response. This is evident in the resulting sums of frequencies as there are teachers in more than one category. A summary of their responses to these questions is provided in Table 10.

Meaning of assessment. The teachers were asked to provide a written description of what the term *assessment* meant to them. Teachers provided definitions which were multicomponent; that is, although there were four distinct meanings revealed across their responses, there were definitions that included more than one meaning. The most popular (n=88; 64.2%) definition involved what can best be described as a systematic method for collecting, ordering, and interpreting information descriptive of pupil progress and

Table 10

__Teachers' Understanding of Assessment and Testing__

Element	f	%
Meaning of assessment	(n=137)	
Systematic method of collecting, ordering and interpreting information about pupil performance	88	64.2
Instructional decision-making	34	24.8
Form of evaluation	37	27.0
Testing	22	16.1
Strengths of assessment	(n=114)	
Provides information for instructional planning	90	78.9
Provides information about pupil performance	62	54.4
Both information for instructional planning & about pupil performance	47	41.2
Reservations about assessment	(n=78)	
There are many factors which inhibit effective assessment	70	89.7
Tendency for test dominance and/or dependence	8	10.3
No reservation about assessment	12	15.4
Relationship between testing & assessment	(n=132)	
Testing is a part of assessment	111	84.1
Testing & assessment are different	11	8.3
Testing & assessment are the same	10	7.6
Reason for relationship between testing & assessment	(n=114)	
Testing is a part of assessment	80	70.2
Using a variety of strategies provides total assessment	38	33.3
Testing is the important assessment strategy	20	17.5
Both are useful for instructional planning	4	3.5
Strengths of testing	(n=11)	
Appropriate strategy for measuring pupil performance	8	72.7
Provides information for instructional planning	4	36.4
Formal/objective nature and characteristic of testing	3	27.3
Reservations about testing	(n=16)	
Inappropriate strategy for Grade 1	13	81.3
Technical characteristic of testing	4	25.0
No reservation	1	6.3

performance. This is exemplified in the following teacher's definition of *assessment*:
"Using a number of methods to collect information on students' performance.
Measurement and analysis of the data and information gathered is to assist in making
necessary adjustments to teaching, and meeting the students' needs." Within their
definitions, some of these teachers also stressed a sustained characteristic of assessment
and the ways in which it can be carried out. The following teacher's statement is an
example: "Assessment is a continuous process of recording data on a child's academic
performance, attitudes, and behaviour. This can be done by observation, data collecting,
testing, questioning, and discussions."

The second meaning of assessment, identified in the comments of 34 (24.8%)
teachers, was related more to the use of assessment information to make decisions about
instructional matters. The following definition provided by one of the teachers represents
well this meaning of assessment: "The use of data to evaluate pupils' level of
performance so as to plan appropriate instructions to meet their needs."

Thirty-seven (27.0%) teachers used the term *evaluation* interchangeably with the
term assessment, while 22 (16.1%) used the term *testing* interchangeably with
assessment. The following four statements are representative of the two meanings
provided by these teachers: "Assessment is evaluating the measure of learning that has
taken place after a concept has been taught"; "Assessment is the continuous evaluation of
pupils"; "An examination to determine the child's ability and what he knows"; and
"Testing to find out how much of what was taught was learned."

In clarifying certain basic concepts and terms related to assessment in the
classroom, Ward and Murray-Ward (1999) posited, "Many terms are used to refer to
educational measurements: Sometimes they are called 'tests,' other times we speak of
'evaluations,' and we also use the word 'assessments'" (p. 68). According to these
authors, the term *assessment* suggests "a broad range of measurement procedures, not
only paper-and-pencil testing, and includes some judgment about the quality of progress
being made by a student or by schools, which incorporates the idea of 'evaluation'"
(p. 69). Further, as indicated earlier, 116 teachers reported that they had completed a
course in Classroom Testing and Measurement (see Table 7). Both the course outline (see

Appendix B) and the text (Richardson, 1996) for this course refer to measurement and evaluation; neither contains the term assessment. In the text, measurement and evaluation are ordered activities: "Evaluation must be based on accurate information which is collected and presented as fairly and objectively as possible. Measurement can help achieve these ends" (Richardson, 1996, p. 3). According to Richardson (1996), measurement helps the teacher to achieve these ends by assigning numbers to data or information which makes it possible for mathematical and statistical procedures to be used for reducing and summarizing the data and information. Seemingly, the generic definition inherent in the teachers' definitions of assessment is influenced by their understanding of the terms *measurement* and *evaluation*. Collectively, the teachers' definitions are in agreement with that stated in the *Principles for Fair Student Assessment Practices for Education in Canada* (1993; see pp. 6-7).

Strengths of Assessment

The analysis of the teachers' comments about what they saw as the strengths of assessment reflected the dual components, but in the reverse order, identified in the teachers' understanding of assessment. Whereas 88 teachers indicated that assessment meant a systematic method of collecting, ordering, and interpreting information about their pupils (see Table 10), 90 (78.9%) of the 114 teachers who responded to this item indicated that a strength of assessment is that assessments provide information for instructional planning and monitoring. The following teachers' statements are representative of the strengths related to instructional planning: "Helping me as a teacher to find means and ways of bringing my lessons across to the children effectively" and "Its usefulness in giving direction to short term and long term instructional planning." Sixty-two teachers (59.6%) saw being informed about pupil performance and their learning needs as a strength of assessment. The following two statements are reflective of these teachers' views: "Keeping the teacher informed about how pupils are progressing" and "Teacher can monitor the progress of her children." There were 47 (41.2%) teachers whose statements about the strengths of assessment indicated an overlap between the two categories. They included the notion of systematic assessments designed to facilitate decision making about individual pupils and about instruction. One such teacher wrote, "Assessment may be used to determine children's strengths and weaknesses and their

level of performance, thus enabling the teacher to be better able to meet the needs of the pupils by planning more appropriate teaching-learning activities." Another said, "Through assessment you can plan and cater for the child's individual needs and plan lessons and instruction accordingly."

Reservations About Assessment

Factors which inhibit effective assessment. Of the 140 teachers, 78 (55.7%) identified one or more concerns or reservations they had about assessment. Seventy of these teachers identified factors that inhibited or obscured the effectiveness and accuracy of assessment. Among the factors cited by these teachers were:

1. Time consuming (n=23; 32.9%): "It takes a lot of time to do an effective assessment for so many children, especially where you have to follow a time table."

2. Inaccuracy of information (n=23; 32.9%): "Because of the conditions of the method of assessment used, the results are distorted, unreliable, and subjective."

3. Use of inappropriate assessment methods (n=14; 20.0%): "There is too much focus on testing, and due to the variety of children's learning styles you should be able to select more appropriate assessment methods."

4. Class size and limited space (n=11; 15.7%): "With a class of 43 I cannot assess individuals, and the limited space in the classroom prevents me from obtaining a true picture of the children's performance."

5. Teacher compensates for inadequacy of assessment (n=11; 15.7%): "Sometimes when the children do so bad on the tests, we have to give them a grade that shows what they have been doing all along."

6. Failure to make use of information resulting from assessments (n=9; 12.9%): "We have a problem with implementing findings, and recommendations made are not followed through or used."

7. Tedious and technical nature of assessments (n=8; 11.4%): "It is a demanding and difficult process. Some teachers have problems with writing questions for tests."

8. Teacher's bias (n=7; 10.0%): "Depends on the teacher's judgment and her ability to be fair."

9. Children's test anxiety (n=6; 8.6%): "Some students perform poorly under the pressure of the assessment. Some of them are genuinely afraid of written tests."

10. Inconsistency of teachers' assessment practices (n=5; 7.1%): "If assessment is not on-going or regular, lesson-planning is inadequate and ineffective."

11. Record-keeping procedures (n=3; 4.3%): "Record-keeping is not secure and has to be done quickly at reporting time."

Tendency for test dominance or dependence or both. There was only one other reservation about assessment, as indicated by eight (10.3%) of the teachers, who said that there was a tendency for tests to be the dominantly used form of assessment, especially at the end of month or term and year. These teachers depended more frequently on the use of tests to assess their pupils because of convenience and familiarity. Twelve (15.4%) of the teachers had no reservations about assessment.

Relationship Between Testing and Assessment

After the teachers provided their meanings of assessment, they were asked about the difference between assessment and testing. Of the 132 teachers who responded, 111 (84.1%) of the teachers felt that testing was a part of assessment, whereas 11 (8.3%) felt that assessment and testing were different (see Table 10). Ten (7.6%) teachers indicated that they were the same.

Reasons for Relationship Between Testing and Assessment

Testing is a part of assessment. The teachers who indicated that testing was a part of assessment were then asked to give reasons for their response. Of the 132 teachers, 114 replied, 80 (70.2%) of whom indicated that testing was part of assessment. Their responses fell into three categories. The majority, 51 (63.8%), of the teachers indicated that testing was useful for assessing knowledge, while the assessment methods were used to get at other behaviours (e.g., higher cognitive levels, skills, and attitudes). One of these teachers commented, "Tests are used mainly to ascertain performance in knowledge acquisition. Assessment involves knowledge, skills and attitudes." The next largest group, 38 (34.2%), of these teachers saw testing as part of assessment, but

provided no indication as to what testing is best used for. One teacher wrote, "All pupils at Grade 1 should not be assessed in the same way. I test to help me make fair assessments; however, my assessment is not based *only* on testing." An additional 22 (27.5%) teachers declared that testing is a necessary part of assessment but not necessarily a sufficient means of assessing young children. One of these teachers stated, "A true assessment is not complete without some form of testing." Another said, "In order to assess each child properly, some form of testing has to be done."

Using a variety of strategies. There were 38 (33.3%) teachers who said that using a variety of strategies provides a total and more individualized assessment. Although this opinion appears similar to that of those teachers (see above) who saw testing as one of many forms of assessment available for use in the first grade, this group of teachers stressed the importance of using a variety of assessment strategies. For example, one teacher wrote, "Testing is only one of many ways to produce a more comprehensive assessment or total picture of the child and cater for individual differences and learning styles."

Test importance. Another 20 (17.5%) of the teachers indicated that testing was the most important means of assessment. One of these teachers stated, "Although assessment during the term is done by observations, discussions and other activities, the important one is the test." And another teacher said, "Testing is the assessment done in the whole school at the end of the term and at the end of the year."

Both testing and assessment useful. Four (3.5%) teachers viewed the relationship between the two terms as being based on their usefulness in instructional planning.

Strengths of Testing

The 11 teachers who indicated that testing and assessment are different identified three strengths of testing, two of which were a repeat of the strengths of assessment. These two strengths of both assessment and testing were to provide information about pupil performance (n=8; 72.7%) and to provide information for instructional planning (n=4; 36.4%). The third argument (n=3; 27.3%) in favour of testing was the formality, efficiency, and objectivity in instrument design and administration.

Reservations About Testing

Two categories of reservations about testing were identified by 16 teachers. There were 13 (81.3%) teachers who saw testing as being inappropriate for the pupils of Grade 1, and four (25%) were concerned about the technical skills necessary for and the characteristics of formulating and making use of tests. For the former group, there was concern about pupils' ability to read and write and follow instructions. Another concern of these teachers was the limitation of tests in assessing a wider variety of readiness skills, behaviours, and attitudes. The concerns of the latter group included the time-consuming nature of designing and scoring tests, symptoms of overcrowded classroom conditions which allowed pupils to copy from one another during tests, and an increasing occurrence of test anxiety among pupils. One (6.3%) teacher said that she had no reservations about testing.

Teachers' Assessment Practices

Assessment Strategies Used by Teachers

The teachers were asked to list the assessment strategies they actually used to assess their pupils. Of the 140 teachers, 131 (93.6%) responded. The strategies they identified are listed in Table 11 in their order of frequency. As shown, by far the most commonly used strategy was the written test; three out of four teachers used this form of assessment. Next in line, but somewhat further behind, were questioning (approximately half of the teachers) and observation (slightly more than one in three teachers). Five other assessment strategies were used by at least 10% of the teachers: discussion (29; 22.1%), written exercise (25; 19.1%), oral exercise (20; 15.3%), oral testing (17; 13.0%), and homework (14; 10.7%). Fifteen other strategies were identified by the teachers. However, their use was reported by less than 7% of the teachers. Among this set were drama and role playing, portfolio, drawing and art and crafts, oral quiz, group work, project, reading activities, research, recording, games, experimenting, field trip, hands-on activities, and music or song activities.

Table 11

<u>Assessment Strategies Used by Teachers</u>

Assessment strategies	No. used (n=131)		Most freq. (n=131)		Least freq. (n=83)	
	f	%	f	%	f	%
Written test	99	75.6	21	16.0	39	46.9
Questioning	67	51.1	46	35.1	0	0
Observation	49	37.4	18	13.7	0	0
Discussion	29	22.1	11	8.4	2	2.4
Written exercise	25	19.1	5	3.8	2	2.4
Oral exercise	20	15.3	5	3.8	10	12.0
Oral testing	17	15.3	4	3.1	3	3.6
Homework	14	10.7	3	2.3	0	0

<u>Most and Least Frequently Used Assessment Strategies</u>

<u>Most frequently used assessment strategy</u>. As shown in Table 11, with the exception of written tests and questioning, the order of the assessment strategies that the teachers indicated they used most is the same as the order of the number of teachers who used each strategy. In the case of written tests and questioning, the order is reversed. Whereas 21 (21.2%) of the 99 teachers who indicated that they used written tests reported that they used written tests most frequently, 46 (68.7%) of the teachers who indicated that they used questioning reported that they used questioning most frequently.

<u>Least frequently used assessment strategy</u>. As shown in Table 10, the assessment strategy which was identified by a large number of the teachers (39; 46.9%) who responded to this item as least frequently used was written tests. Another 10 (12.0%) teachers indicated oral exercises to be their least frequently used assessment strategy. Eleven other strategies were listed; however, their least frequent use was reported by less than 7% of the teachers. Among this set were portfolio, project, field trip, written quiz, drawing or art and crafts, oral testing, discussion, dramatization, written exercise, experimenting, and research.

Reasons for Using Assessment Strategies

The teachers were asked to provide their reasons for using each of the assessment strategies they listed. In analyzing the teachers' responses to this item, on 13 questionnaires the responses to these questions were not clearly aligned with an assessment method and were therefore not used in the analysis. This is likely attributable to the response format. The teachers were provided with a blank page with five column headings (see Appendix F, p. 4). No horizontal lines were included. For these 13 questionnaires, it was not clear what response in one column went with the response in another column. The responses for the remaining 118 teachers together with the corresponding frequencies are provided in Table 12 for the three most commonly used assessment strategies. The following presentation is organized in terms of these strategies.

But before beginning, it is noteworthy that there were two reasons which were consistently identified across the three assessment strategies. These were lesson planning and instructional decision making, and providing information about pupil performance and progress. For example, of the 99 teachers who provided their reasons for using tests, 70 mentioned "lesson planning and instructional decision making," and 47 mentioned "provides information about pupil performance." The corresponding numbers were 33 and 39 out of 67 for questioning and 22 and 26 out of 49 for observation.

Reasons for using testing. As indicated, of the 99 teachers who provided responses, 70 (70.7%) teachers administered tests to generate information useful for lesson planning and instructional decision making. Included in this category of teachers' responses were "to know when to move on to a new topic," "to identify the areas of the lesson that need to be taught again," and "to see if objectives were met." Almost half (n=47, 47.5%) of the 99 teachers used tests to provide information about their pupils' academic performance and progress. Examples of this kind of information included "to identify the children's strengths and weaknesses," "to identify the level at which each child is functioning," and "to find out individual differences."

Table 12

Assessment Strategies: Why Used?

Reasons for use	f	%
Reasons for using testing (n$_t$=99)		
Lesson planning and instructional decision making	70	70.7
Provides information about pupil performance and progress	47	47.5
Appropriateness for assessment	27	27.3
Recording and reporting	25	25.3
Placement - promotion, streaming, grouping	23	23.2
Reasons for using questioning (n$_t$=67)		
Pupil participation and immediate feedback	43	64.2
Provides information about pupil performance and progress	39	58.2
Lesson planning and instructional decision-making	33	49.3
Develops language and communication skills	18	26.9
Reasons for using observation (n$_t$=49)		
Detect pupil characteristics and needs to provide immediate feedback	38	77.6
Provides information about pupil performance and progress	26	53.1
Lesson planning and instructional decision-making	22	44.9
Convenient for continuous assessment	8	16.3
Reporting and recording	5	10.2

The remaining three reasons for using tests—their appropriateness as a means of assessment, their ability for generating information for recording and reporting, and their usefulness in providing evidence for decisions of placement including promotion, streaming, and grouping—were indicated by almost equal numbers of teachers (27, 25, and 23, respectively).

Reasons for using questioning. Among the teachers who used questioning, 43 (64.2%) indicated that they did so to enhance pupil participation and gain immediate feedback from pupils during instruction. For 10 of these teachers, oral questioning allowed for the participation and assessment of pupils who were unable to read or write.

Questioning was used by 39 (58.2%) teachers to generate information about their pupils' performance and progress, whereas 33 (49.3%) teachers made use of this assessment strategy in their lesson plans and instructional decisions. Approximately one in four of these teachers used questioning to assess and develop their pupils' language and communication skills.

Reasons for using observations. Among the 49 teachers who provided reasons for using observations, 38 (77.6%) indicated that they used observation to detect their pupils' characteristics and needs so that immediate feedback could be provided. One teacher's reason was "to see if the children are having problems that need me to help them or to move on with the lesson," and a second teacher said "to observe students' work habits and attention span." Almost an equal number of teachers used observation to provide information about their pupils' performance and progress (n=26, 53.1%) and to inform lesson planning and instructional decision making (n=22, 44.9%). Eight (16.3%) teachers used observation because it allowed them to conduct continuous assessment of their pupils in and out of the classroom. Only five (10.2%) teachers indicated that they used the information generated from observation for reporting and recording purposes.

When Assessment Strategies Are Used

Among the three assessment strategies most frequently used by the teachers, it appears that testing was used for summative assessment, whereas questioning and observation provide for continuous, formative assessment. As shown in Table 13, 62 (62.6%) teachers administered monthly tests, and 47 (47.5%) of them tested their pupils at the end of each term. Twelve (12.1%) of the teachers administered a test when it was necessary; such as at the end of a topic or unit. Ten teachers administered a test at the end of the academic year.

Teachers used both questioning and observation daily, when necessary, and during every lesson. Almost half the number of teachers (n=31, 46.3%) who reported that they used questioning did so daily during their teaching, whereas almost a third of these teachers did so frequently or when it was necessary. Just over 20% of these teachers indicated that they used questioning in every lesson. Most (n=35, 71.4%) of the teachers who used observation to assess their pupils indicated doing so on a daily basis. Nine

teachers used observation as frequently as necessary, and five used it throughout every lesson.

Table 13

Assessment Strategies: When Used?

Frequency of use	f	%
When testing is used (n$_t$=99)		
Monthly	62	62.6
End of term	47	47.5
When necessary	12	12.1
End of year	10	10.1
When questioning is used (n$_t$=67)		
Daily	31	46.3
Frequently or when necessary	22	32.8
Every lesson	14	20.9
When observation is used (n$_t$=49)		
Daily	35	71.4
As often as necessary	9	18.4
Throughout every lesson	5	10.2

Teachers' Record-Keeping and Reporting Practices

Teachers were asked to indicate the ways in which they kept a record of the information they collected from the assessments of their pupils and how they made use of this information for reporting purposes. They were specifically asked to indicate whether they provided grades and comments on their pupils' report cards. Last, they were · requested to provide examples of the comments they frequently made on report cards and to indicate the information upon which the comments were based. The answers to these questions are summarized in Table 14.

Keeping Track of Information Gained From Assessment

As shown in Table 14, teachers kept track of the information that they collected from the assessment strategies they used in one or a combination of four ways. These ways included written forms of record-keeping, cumulative record entries, samples of pupils' work, and their memory.

Table 14

Record-Keeping

Element	f	%
Keeping track of information gained from assessment	(n=129)	
Written records kept by teacher	129	100.0
Cumulative record-keeping	64	49.6
Samples of pupils' work	12	9.3
Memory	8	6.2
Making use of assessment information	(n=103)	
Informing instructional decisions	57	55.3
Informing parents	41	39.8
Informing school administration/ministry	15	14.6
Informing teachers	15	14.6
Informing more than one of above	38	36.9
Grades on report cards	(n=130)	
Yes	121	93.1
No	9	6.9
Written comments on report cards	(n=136)	
Yes	136	100.0
No	0	0.0
Nature of written comments	(n=131)	
Academic performance	99	75.6
Average	22	16.8

Written records kept by teachers. All the teachers (n=129) who indicated how they kept a record of their pupils' performance maintained written records. These records were kept on an ongoing basis in either the teachers' lesson plan folders, data or marks books, or both. All of the teachers had lesson plan folders in which they wrote an evaluation after each lesson was taught. Included in these evaluations were entries of observations and reflections for instructional purposes, as well as information about the performance of individual pupils, specific groups of pupils, or the whole class. The recorded information included pupils' questions, reactions, comments, observations, interests, and concerns arising out of each lesson. The teachers' data or marks books contained their jottings, comments, notes, and more detailed information collected about pupils' performance during the course of a school day. The information resulting from more formal assessments in teachers' lesson plan folders was specifically related to the lessons taught and insights gained during those lessons. However, the information in their data or marks books was gathered from assessments conducted both inside and outside of the classroom and included intra- and inter-individual comparisons and anecdotal entries. All of the teachers were required to keep a class register in which a record of pupils' attendance and grades was kept.

Among the three forms of written records kept by the teachers, the lesson plan folder informed the senior teacher or the principal (see Table 8) about instructional planning and pupil progress, and the class register informed the school administration of attendance and grade distributions. Teachers were not required to submit their records book, which remained in the classroom and was used solely by the teacher for record-keeping and report writing.

Cumulative record-keeping. Another form of record-keeping for 64 (49.6%) of the teachers was cumulative records. Although the practice varied slightly from one school to the next, in most of the schools where these teachers taught, a cumulative record of each pupil was kept in the school office. At the end of each term or academic year, the teachers recorded each pupil's grades and test scores during the term and end-of-term test scores, along with evaluative remarks and comments reflective of each pupil's general performance during the particular reporting period. The information about each pupil that was recorded as cumulative records was summative. Cumulative records

were a source of reference for teachers and principals when preparing transcripts and recommendations, and for other administrative needs and documents. It was apparent that cumulative records were not a practice in all the schools that participated in this study, because some of the teachers were not required to carry out this form of record-keeping. For the 64 teachers who indicated that they kept cumulative records, cumulative record-keeping was a requirement.

Samples of pupils' work. Only 12 (9.3%) of the teachers included samples of their pupils' work as a means of keeping track of their performance. These samples included pupils' workbooks, exercise books, worksheets, test books, and work samples or portfolios.

Memory. Only eight (6.2%) of the teachers indicated that they depended, at times, on their memory. These teachers said that they relied on memory for information about their pupils' performance, attitudes, and behaviour because time was not available for them to record such information, especially during instruction. The phrasing of the item stem (see Appendix E, item 4a) on the questionnaire which begins with "I keep track of the information," along with the provided three lines for a response, may have suggested to the teachers that written or tangible forms of recording were desirable responses. If this was the case, the teachers would not have provided memory as their means of keeping track of the information resulting from assessments. Also, as noted in Chapter 5, all 20 of the teachers who were interviewed (as eight individuals and three focus groups) indicated that they resorted to memory as a convenient way of keeping track of their pupils' performance.

Making Use of Assessment Information

The teachers were asked how they made use of the assessment information they collected for reporting purposes (see Table 14). Just over half (57; 55.3%) of those who responded said the information was used for instructional decisions. Forty-one (39.8%) of the teachers used the assessment information to prepare reports for parents. Fifteen (14.6%) teachers indicated that the school administration or the Ministry or both, and other teachers made use of their assessment information.

To inform parents. Interestingly enough, there were 41 (39.8%) teachers who made use of the information resulting from assessments to inform parents. This is not consistent with the 136 (see Table 14) teachers who indicated that they prepared report cards. An explanation is that these 41 teachers used assessment information to inform parents of their child's progress formatively during the term or as the term evolved.

To inform school administration, the Ministry, or both. Fifteen (14.6%) teachers prepared reports to inform either the school administration or the Ministry, or both. The information was generally used for purposes of norm referencing across Grade 1 pupils within a school or nationally. For example, results of the GRI were used to prepare statistical summaries prepared by the National Assessment Programme Office of the Ministry of Education and Culture.

To inform teachers. The information was used by another 15 (14.6%) teachers who felt that teachers, other than the pupils' class teacher, were also to be informed of pupil progress and performance. Such teachers were usually limited to those to whom Grade 1 pupils would be moving for second grade in the new academic year.

Finally, 38 (36.9%) teachers indicated that they used the information from assessments to inform more than one of the options described above.

Content of Report Cards

Nearly all (n=121; 93.1%) of the Grade 1 teachers used grades on their report cards. Of the 130 teachers, only nine (6.9%) indicated otherwise. All (n=136) of the teachers who provided information about their reporting practices indicated that they wrote comments on their pupils' report cards.

Before discussing these results further, it is noted that there is a discrepancy between these two results and those reported under the heading, "Making use of assessment information." Although 136 (97.1%) of all the teachers who responded to the questionnaire prepared report cards (see Table 14) on their pupils' performance, only 41 (39.8%) of the 103 teachers who responded to this item indicated that they informed parents. A likely reason for this difference is that the teachers related the item on keeping track of information gained from assessment with the first part of the reporting item that requested the teachers to indicate how they used the information for reporting purposes. Instead of responding to how they made use of the information for reporting purposes,

they responded by indicating how they used information gained from assessment (see Appendix F, items 4a and 4b) for reporting purposes in general, and not for reporting through the specific use of report cards.

The majority of teachers (n=99; 75.6%) stated that they provided written comments designed to encourage pupils and their parent(s). The teachers' comments can be classified as long and short. One type of comment was related more to general "academic" performance, whereas others were more specific and somewhat prescriptive. Typical of the general comments made were "worked well this past term," "very attentive and follows instructions well," and "has adjusted well to the classroom situation and shows a readiness for school." More specific, directive comments included statements such as "showed improvement in . . . ," "needs to work harder in . . . ," and "good reader but needs improvement in . . . skills." Other written comments were related to pupil behaviour and conduct such as "needs to settle down," "very disruptive in class," and "needs constant supervision." Comments describing pupil performance as being average (n=22; 16.8%) were "hard worker," "fair term's work," "good year's work," and "good effort."

Grade 1 Readiness Inventory (GRI)

The Grade 1 Readiness Inventory (GRI) is a diagnostic test administered in Grade 1 "to find out which of the basic skills students have when they first enter primary school" (NAP, 1998, p. 7). Through the National Assessment Programme, the Ministry of Education and Culture anticipated that first-grade teachers would make use of the results of pupil performance in the Grade One Readiness Inventory (GRI) to

- plan programmes of instruction to meet the needs of the various levels of students in the grade or class;
- develop and/or select appropriate instructional materials and strategies;
- verify or discount assumptions made in the Grade 1 curriculum guides about pupil's entry skills; and
- identify students who might need further testing or need specific intervention (Ministry of Education and Culture, 1999, p. 7).

As shown in Table 15, 124 teachers reported that they had administered the GRI. The Inventory was not administered in three schools because they did not receive their copies of the test. In another school, construction and refurbishing of the school prevented administration of the GRI in that school.

Table 15

<u>Grade 1 Readiness Inventory</u>

Elements	f	%
GRI administered	(n=136)	
Yes	124	91.2
No	12	8.8
GRI administered:	(n=123)	
In September	81	65.9
In October	30	24.4
In November	1	0.8
More than once per academic year	11	8.9
Use made of the GRI	(n=118)	
Provide information on pupil & class performance	101	85.6
Provide information for instructional planning	94	79.7

Of the 124 teachers who administered the GRI, 81 (65.9%) teachers administered it in September, 30 (24.4%) in October, and one (0.8%) in November. The intention is to have the GRI administered at the beginning of the first term of Grade 1 (NAP, 1999). When the GRI was not administered in September, it was due to a late arrival of the GRI pupil booklets, instructions, and mark sheets. Interestingly, 11 (8.9%) teachers reported that they administered the GRI more than once during the academic year. Their reason for doing so was to assess improvement or progress made by their pupils over time.

Use made of the GRI. Of the 124 who administered the GRI, 118 (95.2%) teachers used the GRI scores. Of the 118, 101 (85.6%) indicated that they used the subtest scores of the GRI to identify the level of mastery of specific readiness skills of each pupil and of the class as a whole. There were 94 (79.7%) teachers who used the

results for instructional planning. The teachers commented that they used the results to make adjustments to lesson plans and instruction, develop appropriate instructional materials, establish ability groups, and challenge pupils in the different groups according to their abilities. As indicated earlier, 11 teachers administered the GRI more than once to provide an indication of the growth and development of their pupils over time.

Assessment Practices - Influences and Comments

Factors which influence assessment practices. The teachers were asked to identify the factors which they felt influenced their assessment practice. The factors identified from a content analysis of their comments are listed in Table 16 together with the number of times that each factor was identified.

Table 16

Teachers' Assessment Practices - Influences and Comments

Element	f	%
Factors which influence assessment practices	(n=103)	
Personal & professional experience	93	90.3
Teacher preparation/pre-service training	67	65.0
Classroom testing & measurement course	65	63.1
In-service workshops & seminars	54	52.4
Educational & professional resources	14	13.6
Instructional planning & pupils' learning needs	10	9.7
Additional comments on assessment practices	(n=53)	
Concerns about assessment	(34)	64.2
Class size	19	35.8
Traditional role of testing	10	18.9
Assessment of academic areas	5	9.4
Recommendations for improving assessment practices	(26)	49.1
Use varied forms of assessment	7	26.9
In-service workshops & seminars in assessment	6	23.1
GRI - ministry to administer, score, and report	4	15.4
Need additional resources	3	11.5

The most frequently (n=93; 90.3%) mentioned factor that influenced teachers' assessment practices was the teachers' own personal and professional experiences. In the words of one teacher, "I have gained from experience through years of teaching in the classroom and from preparation of many lessons—knowing what to use as a catalyst for information gathering about each child." Another teacher referred to an influence of a more personal nature: "I used the same method as that which was used when I was a child in primary school."

Teacher preparation, including programmes in early childhood, primary, special education, and diploma, was the next most frequently (n=67; 65.0%) mentioned factor. One teacher commented, "The knowledge and training I received in Special Education . . . with the constant reminders from my tutors at college that there is the need for continuous assessment have influenced me." A nearly equal number, 65 (63.1%) of the teachers, mentioned that the Classroom Testing and Measurement course introduced as part of the teacher preparation requirements in 1981 influenced their assessment practices. According to one teacher:

> The course Classroom Testing and Measurement has influenced the way I assess. It has made me aware of the importance of assessing each child and the way testing should be carried out. The section on test formats has been especially helpful in our constructing our Grade 1 exams.

Inservice workshops and seminars organized by either the Ministry or the school were the fourth most frequent (n=54; 52.4%) factor that influenced the assessment practices of teachers. Currently, there is focus on assessment through an island-wide school-based assessment (SBA) programme monitored and executed under the aegis of the National Assessment Programme (NAP, 1996). As stated in the SBA programme manual, "The programme trains teachers to develop competence in continuous assessment and provides models for linking curriculum, assessment and evaluation" (p. 5).

Fourteen (13.6%) teachers referred to using educational and professional resources to inform and update themselves on contemporary research and practices in the assessment of young children. They indicated that they referred to available faculty and resources at tertiary institutions, colleagues and teachers in the classroom, and

educational magazines and publications for information about current trends in classroom assessment.

Ten (9.7%) teachers indicated that how they assessed their pupils was influenced by the pupils' learning needs and the instructional planning done to meet those needs. They felt that before decisions were made on assessment matters, it was important to take into consideration factors such as the instructional reasons for assessing, the learning needs and abilities of pupils, and the content and instruction provided to these pupils.

Additional comments on assessment practices. The teachers were invited to provide any additional comments about assessment they wished to make. As shown in Table 16, 53 did so. Two categories were identified among these comments. There were 34 (64.2%) teachers who stated concerns about assessment and 26 (49.1%) who made recommendations for improving assessment practices.

First among the teachers' concerns about assessment was class size (n=19; 35.8%). One teacher described her situation in the following way:

> Due to the large number of students in my class, my assessment practices are at times very time consuming and tedious. However, I try to do my best because I have to show how they are doing and decide whether they can manage or not.

A second teacher commented, "The Grade 1 classes are big and the teacher does not have the time to give each child individual attention when carrying out assessment. You have to assess the whole class. The time doesn't allow for anything else." A third teacher expressed concern about class size and providing for individual differences:

> Grade one teachers experience difficulties and work overload due to overcrowding. The students come in at various levels of readiness and from different Basic schools. Some have no Basic school background. They have different home background. There are too many different group levels of children in one class. Therefore, teachers have to plan for the different level of each child in the class which is quite difficult when it's time for assessment.

Another 10 (18.9%) teachers had reservations about the traditional role of testing. Tests were the dominant summative assessment administered across all Grade 1 classes in their schools. One teacher described this concern in the following way:

> In regard to the termly and annual exam, I think that each class teacher should be allowed to set the exam for her own students because she knows them best, and she knows what has been taught to them. Instead, what happens is that all classes

in the grade do the same exams in all subject areas, and the slower ones are not able to cope. From before they start the exam, they fail it.

Another concern in regard to the traditional role of testing was an overemphasis on using tests as a formative assessment conducted throughout the school year. One teacher stated that

> instead of testing all the time, comments could be made based on the children's performance in class work and home work, and even out of class, throughout the year. It's frustrating for children who cannot read to get sheets of paper with 20 or 25 questions to do. Instead of these tests and exams every month, oral questions could be used to give everybody a chance to show what they know.

The concern of five (9.4%) teachers was that assessment was primarily focused on academic areas. One of these teachers wrote, "At Grade 1 the children are developing many skills in language and social graces, yet we only assess them in the different subject areas."

Recommendations for improving assessment practices were made by 26 (49.1%) teachers. Of these teachers, 7 (26.9%) recommended the use of various forms of assessment. One teacher stated:

> I believe that testing should not be the main focus for children's final grade at the Grade 1 level. A variety of assessments should be used, for example, dramatization, drawing, report, project, or portfolio. These could be used individually or combined to arrive at a final grade for each child. Not every child will perform well on a test. This might not be due to ignorance on the child's part, but to a fear of the test, or the environment, illness, not being able to read, or many other factors.

A recommendation for inservice workshops and seminars in assessment was made by six (23.1%) other teachers. These teachers felt that the Classroom Testing and Measurement course was most helpful in developing their skills in test design. Further, they recommended that teachers who had been through the course were in a better position to guide and mentor others through assessment decision making in schools. One teacher wrote:

> Periodic courses should be arranged to aid teachers in improving their assessment practices and test design. Teachers who have been exposed to Testing and Measurement practices should have more say in the assessment practices that are being used in their school and grade.

In regard to the GRI, 4 (15.4%) teachers recommended that the Ministry of Education, Youth, and Culture be totally responsible for its administration and scoring, and that reports of the outcomes and results be prepared and made available to schools and parents:

> Readiness tests should be administered and marked by invigilators provided by the Ministry of Education, since it is deemed an official assessment. It should be done under a more ideal situation where the children can hear properly, and depend on their own ability rather than copying from others. The assessment is not a true reflection of the children's ability due to the overcrowded condition. Teachers also need to know what to do with the results.

Three (11.5%) teachers recommended that additional materials and resources be made available to teachers and their pupils. One teacher wrote, "Due to the increase in the use of modern technology and modern assessment techniques, there is the need for up to date materials and resources to replace children having to copy tests from the chalkboard."

Finally, three additional recommendations were made. These included that assessment should be individualized (n=2), assessment results and outcomes should be followed by appropriate decisions and actions (n=2), and assessment should be conducted with fairness and be of benefit to the pupils being assessed (n=2).

Summary

A sample of 140 teachers from 61 schools responded to the survey questionnaire. The schools were predominantly located in Region 1 and selected from the Directory of Public Schools, Ministry of Education, Youth, and Culture (1997/1998). Region 1 includes the parishes of Kingston and St. Andrew, a predominantly urban area. Sample selection of schools was based on geographic representation and accessibility. The number of Grade 1 classes in each school ranged from 1 to 6. The average number of pupils in each Grade 1 class was 45.5. The average age of the pupils was 6.4 years.

The largest number of teachers, 84, were in primary schools. All other teachers represented each of the different school types, and the corresponding numbers in descending order included primary and infant, all age, all age and infant, and primary and junior high schools. Of the 140 teachers, 137 were female. The modal age groups among the teachers were 36-40 and 41-45 years of age. All but one of the teachers had teaching

experience at Grade 1. While 62.1% of the teachers possessed a Diploma in Teaching, 12.1% held a Certificate in Teaching and 8.6% possessed a Bachelor's degree. The remaining 13.6% of teachers were pretrained. The majority of the Grade 1 teachers had completed their teacher training programme with a specialization in primary education and were graduates of Mico T.C. (n=52), St. Joseph's T.C. (n=42), and Shortwood T.C. (n=28). All but 23 of the teachers indicated that they had completed a course in classroom testing and measurement.

In the classroom, the majority of Grade 1 teachers indicated that they used a timetable in their teaching. Just over 64% of teachers indicated that they carried out weekly lesson planning. Generally, they developed their plans on their own or along with other Grade 1 teachers. Most (n=122) of the teachers submitted lesson plans to a senior teacher, grade coordinator, or vice principal. The teaching methods used by 134 of the 140 teachers included activities that require active pupil participation (n=118) oral-auditory activities (n=88), audio-visual activities (n=64), reading and writing activities (n=15), and outdoor activities (n=14).

While the majority (n=88) of teachers understood assessment to mean a "systematic method of collecting, ordering and interpreting information about pupil performance," collectively, the teachers' definitions were in agreement with that stated in the *Principles for Fair Student Assessment Practices for Education in Canada* (1993; see pp. 6-7). A majority of the teachers indicated that the strength of assessment was that it provided information for instructional planning and monitoring. The teachers' reservations about assessment were mostly related to factors which inhibit effective assessment, including the time-consuming nature of assessment, inaccuracy of information collected, the use of inappropriate assessment methods, and class size and limited space. Seven out of 10 teachers saw testing as a part of assessment.

The most commonly used assessment strategy was testing. Others included questioning, observation, discussion, written exercise, oral exercise, oral testing, and homework (see Table 11). The most frequent forms of assessment used by the teachers were questioning (n=46), written tests (n=21), and observation (n=18). For the most part, tests were used for summative (grading) and formative (instruction) purposes, while questioning and observations were used for formative purposes.

All of the teachers kept written records of the information gained from their assessments. They used the information primarily for informing instructional decisions and the parents of their pupils. Slightly more than 9 out of 10 teachers prepared report cards with grades; all teachers included written comments. Three quarters of the teachers indicated that their written comments described pupils' academic performance.

Of the 124 (91.2%) teachers who administered the GRI, 65.9% administered it in September. The teachers used the GRI to provide information on pupil and class performance and for instructional planning.

Most of the teachers indicated that the factors that influenced their assessment practices included personal and professional experience, teacher preparation or preservice training, the CTM course, and inservice workshops and seminars (see Table 16). The teachers indicated that their concerns about assessment included class size, the traditional role of testing, and assessment being focused on academic areas. Their recommendations for improving assessment practices were the use of varied forms of assessment, inservice workshops and seminars in assessment, making the GRI the total responsibility of the Ministry, and additional resources.

CHAPTER 5
REPORTING WHAT TEACHERS SAY—INTERVIEWS

There are times when children have come to me, and the parents, they have come to tell me that their child can do this and their child can do that and where he is coming from; he is a star. And so they're telling you now that you don't have to start from scratch. Now, my answer at all times is that I will have to start there so I can know my students and what they are capable of...but I always tell them, I say wherever this child is coming from, the yard-stick that they use to measure is different from the one I use here. (FG1. 2. 5-14; Grade 1 teacher)

Introduction

The words above are those of a teacher as she reflected on the assessment practices she used in her class of first grade pupils. She spoke to a number of issues that are on the minds of teachers as they teach every day. These issues include parental expectations and involvement, factors to be considered in instructional decision-making, and the different ways that teachers assess their pupils' performances. These are some of the issues that emerged during conversations with Grade 1 teachers as they talked about their assessment practices.

In the previous chapter, a description was provided of the teachers' responses to the survey items. At the end of the survey instrument, the teachers were asked if they would be willing to continue their participation in this study by being interviewed. Eleven sets of interviews were subsequently conducted, 8 with individual teachers and 3 with groups of three, four, and five teachers, respectively. Throughout this report, each of the responses quoted has been coded to protect the teacher's identity. Each teacher has been identified as either Individual Teacher (IT), or Focus Group (FG) member and a number. This is followed by the page and line numbers of the transcription. What these 20 teachers said provides the content for the present chapter. Their responses are summarized in relation to the survey items and, ultimately, the research questions.

First, a description of the schools and classrooms in which the teachers who were interviewed taught, the teachers' educational and professional characteristics, and the teachers' perceptions of parental expectations of assessment is provided. Next, the teachers' responses are presented, beginning with their understanding of assessment, followed by their assessment practices including the selection and frequency of the

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assessment strategies used, their use of assessment information, the factors that influence them as they assess their pupils, and some of the concerns they have as they assess their pupils. The chapter concludes with an account of the teachers' recommendations for improving the assessment practices of Grade 1 teachers.

School and Classroom Characteristics

School Characteristics

As shown in Table 17, the 20 teachers who were interviewed taught in 11 schools, including seven primary, three all age, and one primary and junior high. Nine schools had between 1000 and 2000 pupils; the remaining two schools had 153 and 463 pupils, respectively. Class sizes ranged from 30 to 64 pupils. Nineteen teachers had unigrade (Grade 1) classes. In the smallest school, the class was multigrade (12 Grade 1 pupils and 13 Grade 2 pupils).

Classroom Characteristics

The size of the classrooms in which the 20 teachers taught typically was small for the number of pupils taught in them. One of the teachers taught her class of 53 pupils in an area of 480 sq. ft. (24ft. x 20ft.). Classroom movement by both pupils and teachers was limited. While 11 of the teachers taught their classes in separate classrooms, the other nine teachers taught classes which were partially separated from other classes by portable chalkboards or walls. For these nine teachers, classes shared the same space with neighbouring classes in a room or hall, and the pupils faced different directions in order to reduce distractions and disruptions.

Generally, the desks within the classrooms were arranged in a conventional way, with rows of pupils facing the chalkboard. The teacher's desk and chair were also located in the front of the classroom. Given this arrangement, the teachers could not move conveniently around the room. Consequently, pupils brought their work to the teachers in front to be marked. Often, though, the teachers found that they had to mark a lot of the children's work at home, given class sizes.

Table 17

Teacher Characteristics - Individual Interviews & Focus Groups

Teachers	School type	School enroll-ment	Class size	Age	Educ. quali-fications	Teaching. experience		Grades taught
						P	T	
1	Primary	463	35	36-40	Diploma B. Ed. primary	0	12	1, 2, 4, 5
2	Primary	1482	51	31-35	Diploma B. Ed. E.C.E.	5	2	Inf., 1
3	Primary	1140	30	51-55	Cert. diploma primary	6	28	1, 2, 3, 4, 5, 6
4	Primary	1100	44	31-35	Diploma primary	0	12	1, 2, 3, 5, 6, 8
5	Prim. & jr. high	1000	38	36-40	Diploma E.C.E.	5	1/3	Inf., 1
6	Primary	1500	64	41-45	Cert. diploma E.C.E.	6	18	1, 2, 3
7	Primary	1400	46	60+	Cert. primary	6	29	Inf., 1, 3, 5, 7, 8, 9
8	All Age	153	12	36-40	Pre-trained basic school	7	0	1, 2, 6, 7, 8, 9
9	Primary	1309	52	36-40	Cert. diploma primary	0	17	1, 2, 3, 4, 6
10	Primary	1309	48	21-25	Diploma primary	0	4	1, 2, 4
11	Primary	1309	50	31-35	Diploma primary	5	1/3	Inf., 1
12	Primary	1309	47	36-40	Diploma primary	5½	10	1

(table continues)

Table 17 (continued)

Teachers	School type	School enroll-ment	Class size	Age	Educ. quali-fications	Teaching. experience P	T	Grades taught
13	All age	1430	46	26-30	Diploma primary	1	4	1, 3, 6
14	All age	1430	47	36-40	Cert. diploma primary	0	15	1, 2, 3, 8, 9
15	All age	1430	49	36-40	Diploma primary	0	10	1, 4, 5, 6
16	All age	2000	47	36-40	Cert. diploma primary	2	20	1, 2, 3, 4, 5, 6
17	All age	2000	41	36-40	Cert. primary	10	17	1, 2
18	All age	2000	44	46-50	Cert. diploma primary	1	24	1, 3, 4
19	All age	2000	43	46-50	Cert. diploma E.C.E	4	23	Inf., 1, 2, 3, 4
20	All age	2000	48	46-50	Cert. diploma E.C.E	9	18	1, 2, 4, 7, 9

The furniture in the classrooms was heavy, bulky and difficult to move about. All of the teachers had little space to store or display instructional materials and their pupils' work. The materials which were on display often covered classroom walls right up to the ceiling. Most materials used by the teachers for instructional purposes were teacher-made. Examples of these, including pictures, charts, mobiles, and flash cards were hung and displayed in places which made them inadequately accessible for use in teaching or manipulation by the pupils.

Although the teachers attempted to monitor the progress of all their pupils by correcting work done during class time, they found that they often had to complete their

marking at the end of the day. Otherwise, pupils remained at their places during instruction, for most of each school day. The teachers also reported that classroom noise was pervasive. Yet despite these conditions, the teachers indicated that teaching activities were maintained and learning did occur.

Educational and Professional Background of Teachers

The ages of the teachers ranged from 21 to over 60, with approximately half (n=9; 45.0%) between 36 and 40 years of age (see Table 17). Two teachers held a Bachelor of Education Degree, 17 held a Diploma in Teaching, two held a Certificate in Teaching, and one was pre-trained (but working toward a Diploma in Teaching). There were 14 teachers who had specialized in the primary education programme, while five completed their teacher preparation programme in early childhood education. The pre-trained teacher was specializing in primary education.

Six teachers had no pre-trained teaching experience. The pre-trained experience for the remaining 14 teachers ranged from 1 to 10 years. The teachers' years of teaching experience as trained teachers ranged from one term (1/3 of an academic year) as in the case of the two beginning teachers (Teachers 5 and 11, Table 17) to 29 years (Teacher 7, Table 17). While all the teachers indicated that they were teaching Grade 1, 12 had also taught Grade 2, 10 Grade 3, and 9 Grade 4. Almost the same number of teachers, six and seven, had taught Grades 5 and 6, respectively. An equal number of teachers had taught in an Infant class and classes above Grade 6 (n=5). The 17 teachers who held a Diploma in Teaching had completed the course in Classroom Testing and Measurement (CTM).

Teachers' Perceptions of Parental Interest, Involvement, and Expectations

A hallmark of parents of young children is their level of interest and involvement in and expectations of the learning-teaching situation of their children (Brewer, 1992; Seefeldt & Barbour, 1998). The importance of the resulting alliance between parents or caregivers and teachers has been referred to by many educators of young children. Eliason and Jenkins (1999) argued that

> everyone benefits when parents are involved in their child's education, and all parents have competencies that will help their child succeed in school. In order for the teaching of young children to be effective, a positive link must be made between the school and the home; the two must be partners, since they are both vital parts of the child's life and education. (pp. 52-53)

The 20 teachers who were interviewed acknowledged the significance of parental involvement at the stage when their children began formal primary education. They pointed out that parental involvement included helping children with homework and providing support for at-home assignments and projects. With regard to parental concerns about their children's performance and their willingness to become involved in their children's schooling, one teacher related:

> I think most of the concerns have been with the level of performance of the students. They [parents] are eager to know how well their child is doing. That is their main concern. And they…some of them ask how they can help the child at home. Some ask if the children get homework because the children don't take home their homework. Maybe they don't want to go home and do homework. They want to go home and play or watch television. So they don't report to their parents about the homework, which is given on a daily basis. Some of them stay back and play at school, so they forget all about the homework. But if written homework is not set, they're usually asked to do their reading because they are very weak in their reading. And parents can help with that too. Quite helpful for us, we'll be able to deal with a lot of the homework problem because two weeks ago we got our copier. We had to raise the funds ourselves. So we are able to do worksheets and so on, and send them home. So now that they'll be getting more homework, the parents will be concerned about how well the children are picking up [progressing] after daily lessons. And they'll start checking for activities in the children's books. And if they don't have any work in their books, then the parents will come and check the work on the board. (IT2. 8. 44-45. 9. 1-13)

All of the teachers interviewed felt the need, at times, to provide parents and care-givers with some guidance in the kind of assistance to be given to the children. There were several reasons for this.

> You have to call them [parents] in, because some of the parents want to help the children [with homework], but don't know what to do. Some of them come in for help, or ask what to do. But some don't help for fear of doing the wrong thing…. Some parents help, but in the wrong way. (FG3. 5. 21-23)

The 20 teachers also guided parents in order to avoid a conflict that resulted when children refused adult assistance at home because it was "…not the same like what teacher do at school" (FG3. 5. 37). One teacher shared her experience in regard to soliciting parental assistance in the children's reading homework as well as providing appropriate guidance in this way:

When the parents come . . . I send for them and tell them this was where your child was when they came in September, and this is where your child is now. So you see, your child has only learned 5 words. That is not enough. So you are to give your child some help. And I show them...a set [of parents] came in, and they had to learn the phonics sounds, and to go back and teach the children. And it was really good. You could see the result, you could definitely see the difference. (IT7. 4.20-27)

The teachers cited instances of conflict which existed because of differences between home and school practices. For example, one teacher pointed out that parents often used "Reading" as a means of punishment. This "punishment" then led to a deleterious effect on the pupil's performance in class. One teacher described one such occasion this way:

Sometimes, even in the Reading, what you find is when you call a child to read, that child is intimidated and anxious. And you know that at home, they use the Reading as punishment, "Go to yu book! Yu outa door a play...before yu tek up yu book an' read!" So I tell them, don't do that, because if the child is turned off, when such a child comes to me, I'm not able to turn on the child to Reading because it is a punishment for him. (FG1.6.44-45.7.1-3)

The teachers reported that many parents of Grade 1 pupils inquired about their children's progress and performance in school with greater frequency than parents of children in higher grades. Relatively more attention and assistance were given to the children in their homework and other home-assigned projects and activities.

Parent-teacher conferences were comparatively better attended than parent-teacher conferences at the higher levels. In addition to attending parent-teachers conferences, some parents would occasionally visit the classroom. A smaller number made appointments to talk with the teachers about their children's general progress.

Teachers' Understanding of Assessment

For all 20 teachers, assessment was a necessary part of teaching. Although they discussed the benefits of using alternate assessment strategies, it was clear that testing was the dominant form of assessment when making decisions about their pupils' performance.

Meaning and Purpose of Assessment

All of the teachers understood assessment to be the means of finding out about their pupils' performance and rate of progress following instruction. One teacher commented, "Assessment helps us to find out the level of learning that has taken place...the means by which we find out if the children have learned the concepts of a lesson taught" (FG2. S. 4). A second said, "To see if what was taught has been grasped and to what extent" (FG3. 1. S. 3). Nine teachers added that assessment was to inform lesson planning and instructional decision-making. One of these teachers indicated that, "Assessment is checking to see if objectives have been met and if teaching methods were appropriate. I use assessment to find out my own weaknesses and strengths and the weaknesses and strengths of the lesson" (FG3. 1. S. 3). A second suggested, "Assessment means having an idea of where the children are and through lesson planning, take them from there; reteaching a lesson if necessary" (FG1. S. 3). Eight teachers said assessment was synonymous with evaluation and testing. One of these teachers simply said, "Assessment is an evaluation of achievement" (IT2. S. 3), while a second tied assessment and testing together, "It [assessment] is finding out the measure of learning that has taken place. It is testing" (IT5. S. 3). A third said assessment is "the measurement of learning" (IT5.S.3). Inherent in the understanding of assessment and testing by these eight teachers was the notion of being able to interpret each pupil's performance numerically. They saw assessment as being systematic and enabling teachers "to see if the children's [or child's] performance is consistent, if any progress is being made and to identify the extent, and the factors affecting or enhancing each child's progress" (FG1.S.3). In contrast, five teachers understood assessment to be the use of various methods to find out about children's performance and total development. For them, "Assessment means using questioning, tests and observation to find out how the students are progressing" (FG2.S.5), or "Using various methods to find out what students know or have learned over a period of time"(IT4.S.3). One of these teachers related how her understanding of assessment changed over the years:

> Well, before I went to college, I thought assessment was just giving a test and having them [students] write the answers and that was the way I thought it throughout. Then I went to college, and I realized that assessment was more than just writing a test on paper...it was discussion, it was the little project, carrying

out a task, or whatever. It was the questions that did not have to be written down, but which would give you an insight into the level of performance of the pupil.... Now I'm in the classroom, it [assessment] is definitely no longer only the pen and paper test, but it's all these things and ways...the questions, the individual work, observing them at work and play . . . throughout every lesson, and throughout the day. (IT5. 2. 42-43. 3. 1-7)

One teacher, after providing her understanding of the term assessment, declared, "But understanding assessment is one thing...putting it into practice is quite another thing" (IT8.6.34). She went on to say:

I did not think assessment was anything other than testing, it was . . . the test. Then after . . . while I was at college, then I realized that it is not only the written test. Then in the classroom, I realized that there is so much in the child that is happening. You can see it during the whole school year, . . . and testing alone doesn't tell you everything. I believe in continuously assessing the child. You realize that assessment is a continuous process. It is measuring the whole child. Yes, it is academic, but it is also behaviour. . . . Yes, it is everything about the child; . . . it is the child's physical, emotional, spiritual, everything...total development. (IT8.6.35-43)

The teachers all agreed that assessment must include the collection of information about the acquisition of knowledge and the development of skills and attitudes. The teachers pointed out that instruction in Grade 1 is designed to develop the whole child and, consequently, that assessments should reflect this holistic view. One teacher commented:

I believe first of all that I am one of the advocates for early childhood trained teachers to be at the Grade 1 level. At this level, the children are still . . . in their formative years, when development is happening in every way. And the strategies we learn as early childhood teachers help us to cater for their total development. These same strategies should be used to assess them too. We cannot expect them to perform at a Grade 2 or Grade 3 level, . . . so I don't think we should have stringent measures of testing. I believe this is where we should...start with a variety of assessments. (IT4. 8. 8-13)

All of the teachers added that, given the unpredictable nature of the acquisition and mastery of readiness skills in first grade, it is necessary to assess pupil performance frequently or continually. One teacher commented:

It goes right back to the readiness skills. We have had children, even when they started in September...nothing...nott'n nah go an [nothing was happening]. December come, nott'n still happ'n [still nothing happened]. And all of a sudden, one January morning [fingers snap] dem start to click [something clicked]. You just know that well, this child has just begun to settle down and things happening.

You have to write it into your data book. Well, this child has begun to do something, he has shown signs of improvement in his reading or his writing skills. (FG1.13.3-9)

Further, the teachers added that assessment should be conducted in both formal and informal ways. During more formal assessments, pupils were aware that they were going to be assessed, and the conditions for assessment were established. Testing was the most frequently used form of formal assessment. In contrast, during informal assessments, pupils were not aware of being assessed. Unlike testing, where the conditions of the assessment were set and the same for all pupils, informal methods were varied, with information observed recorded either anecdotally or just remembered by the teacher for future reference. One teacher described an example of informal assessment:

> I was just sitting at my desk one day. The children love to read in little reading groups. And I might just sit one day and hear a little reading, and I just look up and I just make a grade. I just give that child a grade because the child has been reading. Sometimes it is unusual to catch that child reading during Reading time. That grading was unknown to the child but he was showing me that he could do something. (FG1.7.3-8)

The 20 teachers pointed out that one of the reasons for using informal means of assessment was to avoid anxiety. They indicated that when pupils were aware of being assessed, there were often visible signs of anxiety, such as complaints of tummy ache, wanting to go to the bathroom with increased frequency, staying home from school, bed-wetting, pulling out hair, nervousness, not being able to perform at all, or crying. One teacher related:

> By the time they [the pupils] start to do tests, they realize that it's something important and they start to get nervous and some of them cry for headache, and they cry for tummy ache. Some of them even cry that their hand hurting them and they can't write. And they don't want to do anything. Some of them start crying, crying, crying and just not doing anything for the whole time. You know, I think testing for that stage, for that age group, I don't really like it...it's not right. (IT2.4.12-16)

All of the teachers commented that assessments were more useful when carried out at both the individual and the class levels. A specific skill finally mastered or the need for additional practice exercise in a particular area was the kind of information that was noted at the individual level. At class level, pupils might be given a set of mathematics

problems. If they showed that they understood the process involved, then the decision was made to move on to the next topic or concept. One teacher explained:

> Okay, before the lesson, I would have to have a set of objectives that I would want to meet. While the children are doing the activities, or are involved in the experience, as the teacher, I have a mark sheet with their names. I would go from group to group, ask them questions and based on their answers, I would discover what they have learned. If they were able to understand or pick up what I wanted them to learn, I would tick their names. If they are not going according to what I want them to learn, I ask them questions that gear their thinking. Sometimes I leave it open at some point too, to see what they come up with. Probably there could be times during the experience that I want them to learn something specific and I also want to find out what they have learned on their own. First I have to know exactly what I am looking for and make notes of these things. Then I have that record of what each child learned and eventually how the whole class is learning. Then I'll know whether to move on or not. (IT4.3.14-26)

The teachers offered evaluative type comments about the various assessment procedures. For example, twelve teachers felt that assessments that depended on pupils writing their responses were inappropriate for pupils in first grade, especially during the first term when reading and writing skills were not yet mastered. According to one teacher:

> When assessing grade one children, you need to understand that their writing skills are not yet developed. You can't dictate to them for them to write. You can't get them to write anything for you the way that they can explain it to you...so you have to depend on the oral means. (FG1.14.3-6,19)

In contrast, all the teachers felt oral assessments were more appropriate. Teachers relied on questioning and discussion, pointing out that their pupils were better able to "talk" than to "write." They added that the non-written forms of assessment could be administered more quickly and "on the fly," than could written assessment forms. One teacher explained:

> None of us can get to complete everything to be done everyday. And we don't have time to give a written activity for everything either. I do a lot of oral activities to get through the lessons for the day. So we have a lot of questions and discussions and so on. We do it for comprehension and language. We do it for social studies, science, and usually for religious education, poetry, listening, and phonics. We do it in just about all the subject areas. (IT2.27.34-38)

However, while the teachers relied a lot on the use of oral assessment strategies, they were cognizant that pupils, their parents, and other members of the society questioned the credibility of these assessments. One teacher summarized this in this way:

> Society has set such a norm on the written exercise itself, that when the work is done orally, it's like they [parents] feel as if they [pupils] have not accomplished anything. And you know, that for many of the children, it's a great accomplishment because they are not as efficient with their writing and all of that as when you talk about things from their background, talk about things in their own environment, talk about things that they have experienced. It is their experience, so it's concrete to them. And yet still, others who are performing at a different level feel that they have not accomplished anything because the written exercise is the norm. For many of the children...quite a few of them, you need to assess them...orally on things that they...can just talk about...because they are not functioning at the level where you can assess them from a written exercise or test. (FG1.6.14-25)

All 20 teachers spoke about existing test-oriented system in their schools requiring that formal tests be administered at least once during the academic year. They expressed dissatisfaction with this system, did what was required, and compensated for the inefficiencies of tests and their results when necessary. One teacher said:

> You don't like it [testing], but you can't get away from it. It is in the system, and you have to prepare the children for a future in it. The most you can do is like during the regular class time you use less paper and pencil tests, and use more of the variety of alternative strategies like observation and discussion and so on...I don't think we'll ever be rid of the end of year test. That is way, way out of the reality for now. (IT2.25.32-34, 26.46-47)

> So you have to help them [pupils], to get them as ready as possible before test time. So when test time comes around, they are able to function. But there are the ones that, when it's exam, you have to go around and go through on a one to one thing with them in getting the activities [test items] completed. (IT2.5.16-17, 21-23)

Teachers' Assessment Practices

Assessment Prior to the Beginning of the School Year

During the first term of Grade 1, the teachers reported their instruction was directed toward helping their pupils through their transition into formal education and to adjust to the particular primary school in which they, the pupils, found themselves. The teachers emphasized what one teacher referred to as "life skills, social skills, common

courtesies, and language development" (FG1. 14. 33-42). A second teacher described these introductory activities as the "…basic things to get around…'please,' 'excuse me,' 'thank you,' you don't run along the corridors, you walk up and down the stairs, to get your lunch you say, 'May I have a bag of that'…before you get into academics" (FG1.14.33-34, 36-40). These school norms were reinforced through a variety of activities during the beginning of Grade 1.

At the same time, the teachers pointed out that they had to discover what the children were able to do and to diagnose their learning needs. The teachers wanted to gain "…a general idea of…where to start with the class…what is to be taught and at whatever level" (IT7. 6. 21-23).

School-designed entrance exercises. The teachers in two of the schools reported that school-designed entrance tests were completed by the pupils prior to the beginning of the school year. For example, the teachers in one of these schools designed and administered their own "readiness test." An adaptation of the GRI, where sections on the different skills were kept but modifications were carried out on specific items, the test was administered at sittings during summer school in July, at which time all newly registered pupils were expected to be in attendance. By September, all the Grade 1 pupils in this school would have completed the school-prepared readiness test. One of the teachers from this school described the proceedings:

> We give them [pupils] a test in readiness, including hands-on, and including differentiating between things. We do number ideas that are number knowledge; see if they have a knowledge of numbers. We do letters and sounds to see if they can identify letters and the sounds that go along with them. We do all of that, and we also do oral comprehension with them. How do we do this? We give them pictures, we discuss pictures with them, and from that we ask them questions to see how well they can listen and understand something that they talk about and how well they can talk about what they have discussed. From doing all of that, we use that as a guide in preparing our teaching and materials. We will know from the orientation…the children who are ready to start the primary programme and those who are not yet ready. For those who are ready for the primary programme, we prepare lessons for them, and for the ones who are not ready, we set up a readiness programme for them, so that we can build them for the first two months in the first term of the school year before we start the primary programme with them. That is what we do with orientation for our children. Now, the Inventory that comes from the Ministry, we…that always comes late, but we administer that as well. Then what we do with that, we compare the results from that test with ours. Most times it is exactly the same or pretty close. (IT1.1.28-45)

In the second school, an entrance exercise was prepared by the teachers and administered on the chalkboard during registration in April preceding the new academic year. However, the teachers in this school reported that they often found that the pupils' performance had changed dramatically by September. Despite this, the pupils' performance in April was used for grouping, streaming, and curriculum and lesson planning.

Grade 1 Readiness Inventory (GRI). In the remaining nine schools, the GRI was the only diagnostic instrument administered. This test was administered during the first month. A teacher in one of these schools declared:

> When they [pupils] are not ready, it puts a strain on us. And when they come in September, you can't start teaching until you administer the test. That is what we are told. You are not supposed to start teaching the syllabus until you do the readiness inventory test! So, the only thing you can do...you are still teaching, but you are not teaching from the syllabus. You just give them something to do...just to keep them occupied. You start to revise what you think they did at Basic School, then you go through the alphabet and number, and so on....You give them right and left activities, let them stand and sit and do things to see if they hearing you. And then you give them writing to see how well they can write and how well they form their letters and so on. But it's not really formal teaching. You cannot teach formally until you've completed the test. And that takes over two weeks. So, all of September is finished by the time you give the test. (FG2.13.8-11, 17-26)

In contrast, another teacher commented:

> Yes, we are quite happy to have it [the GRI]. Usually, before we get it, we just talk to them [the pupils]. We just get them used to the school....But what I find, you see the NAP thing, you can pick up from there...who is able to form their letters, who you going to have to do a lot of work with, who not ready yet, who will soon be ready, and who you going to put where. (FG1.14.25-28, 30, 32-33)

All 20 teachers reported that they administered the GRI either in September or October, with the date dependent on when the Inventory booklets were received from the National Assessment Programme office. The teachers did have concerns, particularly with the administration of the GRI, and the lack of readiness of the pupils for a test like the GRI. One, for example, described the administration of the GRI at her school in the following way:

> Because everybody's class is so big, it takes two weeks to do it [GRI]. So we break up each class into small groups. They [NAP office] say that you are not to leave the children on their own while they do the test, and you're not to force them to hurry....Anyway, you can't do the whole class at the same time because they will copy. So, if I have 50 children, I'll do 25 in the morning before break, 25 after break. We have to distribute the other 25 to the other classes....It is hard for the other teacher who is there now to teach...because she now has 75. Or she might have 60 and another teacher has 15 more. And that's why it takes so long. (FG2.13.28-30, 33-36, 40-42, 44)

The amount of time it took to administer the GRI varied across the Grade 1 classes. For the teacher above, the administration of the GRI to the four classes in the school required up to 2 weeks. In her school, the pupils in each class were tested in small groups of approximately 25 children. While one teacher tested a group of 25 pupils, the remaining pupils were supervised by the other Grade 1 teachers. This continued from one class to the next until all the children were tested. In another school, the teachers reported that the GRI required from one to one-and-a-half hours to administer over two sittings in one day (IT3.19.14, 16). In three schools, the teachers pointed out that since the GRI was the first formal test administered, and that the pupils were unaccustomed to the instructions and response format of the GRI, more time than initially expected was needed. One of these teachers said:

> Since it is their first big test in the grade, I find it takes extra time to go through individually. It's hard to go one-one, but...you say to the children, "Put your hand on number 1 everybody." And you have to go around to see if everybody is on number 1, and doing the right thing. And you read the instructions over and over before you can go to number 2. (IT3.19.6-9, 14, 16, 18-21)

Despite these difficulties, only two teachers indicated that their pupils experienced difficulty in completing the items. Both teachers said they were administering the GRI for the first time and were, therefore, not familiar with the Inventory and its content. One of these teachers described this first experience, saying:

> For the Inventory test that is used at the beginning of the first term, even though it was my first time with it, it was very evident that most of the children did not understand the concepts. They were given apple trees to put...no, they were given chickens to give each chicken an egg. Many of them did not understand. They did it incorrectly. So I had to reteach that concept. And then I used it in the test again to make sure. Most of them understood by the second time, but there were still

children who were having problems with it so I had to teach it over again. (IT4.6.44-45, 7.1-5)

Use made of the GRI. Five of the 20 teachers indicated that they made no use of the GRI results. The remaining 15 teachers reported that they used the GRI results to guide instructional planning, describe individual pupil's level of performance, confirm information gathered from other assessments, place pupils in different instructional groups, and identify levels of mastery in specific readiness skills. Typical of the description made by these teachers was:

> I think the readiness test is worthwhile. I think it came in the nick of time. Judging from the fact that so many children come in from so many Basic schools; and they are at so many different levels. Administering the readiness test helps us to...to be able to start our planning...to plan our curriculum with the children in mind...and their needs. You get to know their real needs, where they are at, how far they can go, how I should group them. You know if they can colour in the circle, and if they can do all those things, that the motor skill is there. The phonics section is there, the visual is there...and it is a all-round thing. It's easier for us...and what makes it special for me is that it is ready...it is already prepared, so we just apply it (FG1.15.27-39).

Concerns about the GRI. While the teachers indicated that they were aware of the expectations held for the use of the GRI, they expressed concern about the inconsistent manner in which the GRI was administered. They reported that they felt inadequately trained in ways of making use of the GRI results of their pupils, and called for in-service training that would better prepare them to plan and prepare a readiness programme that would provide the specific kinds of activities that would be most useful to their pupils in developing their reading and writing skills. They pointed out that overcrowded conditions created administration difficulties, and inadequate staffing in schools did not allow for invigilation by teachers other than teachers with their own classes. In three schools, insufficient space required that the pupils be divided into two groups. This led to supervision problems for the pupils in the group not being tested. A teacher in one of these schools said:

> What we have is open classes, so there is noise. Because we have so many children, it was suggested that we share the class in half, and don't do all of them at the same time. So even though you might push the desks over, so you can space out a half of the class, the others are there and they are making noise and distracting those who are doing the test. So you find that's another problem...the

crowding and setting. You don't have much control over what the children are doing in terms of the performance or getting any accurate scores because there are those who are distracted by the others. And you see the ones who are just coming from Basic school, they don't really understand what they are doing. You have to keep insisting that they don't communicate with each other and help each other on the paper. So it's very difficult....Even when you do space them out as much as possible, they peep and they stretch their neck over. The only way it is possible is to do a one to one or so, but apart from that...you can't guarantee valid results. (IT2.24.25-34, 36-37, 39)

Due to the inadequacies of the classroom setting for administering the GRI, this teacher expressed concern about the pupils copying and questioned the validity of the test results. Pupils became distracted and had difficulty concentrating on completing the required tasks. Another teacher said that since the test was too long, it was necessary to administer it in two sittings. She explained that due to lack of experience, many pupils had difficulty in following instructions. The need for repeating instructions was time consuming and extended the total time necessary for each group to complete the test.

To encourage use of the GRI results, one teacher at each school was to be appointed as the School-Based Assessment (SBA) coordinator. These school coordinators could be from any grade. They received training to develop "...competence in continuous assessment," (p. 5) and were provided "models for linking curriculum, assessment and evaluation" (p. 5). The SBA coordinator at each school was required to:

A. Collaborate with the school administration and other senior teachers to facilitate training and staff development in assessment strategies for teaching and evaluation.

B. Assist the principal to evaluate teachers' continuous assessment plans.

C. Assist the principal to evaluate teachers' continuous assessment procedures, instruments, and pupil feedback methods.

D. Ensure that teachers mark, analyze, interpret, and use their assessment results in a proper and timely manner.

E. Assist teachers in using and interpreting the results of the Grade One Readiness Inventory, The Third Grade Diagnostic Test, and other NAP tests. (Ministry of Education, Youth and Culture, 1996b, p. 9)

Of the 20 Grade 1 teachers interviewed, only one was the School-Based Assessment (SBA) coordinator (Ministry of Education, Youth and Culture, 1996b) for her school. Referring to her role as the SBA coordinator for her school, she said:

> Originally when the programme was just coming on stream, we usually go to workshops...we took some examples [of test answer booklets]...and they usually assist us ...on how to assess the results that you get back and different strategies that you can use and give the child. That was in the pilot project. And then we get to go through all of that.I am the coordinator for the programme now, and I am to ensure that all of that is done...when the tests are done, the results are evaluated and how we should evaluate the results and what certain scores might mean and certain achievement levels that we need in order to group. (IT2.24.14-20)

As this teacher had attended NAP workshops, she said she was more informed about making use of her GRI results.

Assessment Strategies Used by Grade 1 Teachers During the Year

> Generally, we don't weight them [different assessments] equally, well I can truly say, usually we don't weight them equally...because such emphasis is put on the written assessment. So much emphasis is put on the written assessment, and tests in particular, it's as though it is more important than all the rest. So even though I use a lot of different things to tell me how they [my pupils] are doing in class, it is the written one that carries the weight. (FG1. 9. 25-29)

As the teachers reflected on their assessment practices, they were asked to respond to questions about the methods they used to assess their pupils, the reasons for using particular assessment strategies, and in the case of tests, how they were developed, constructed, and administered.

Assessment methods. All of the teachers who were interviewed shared the view that the use of a single assessment method could not elicit samples of performance which would reflect the many areas of a young child's development at the Grade 1 level. A typical response was, "Because we know all of our children are not at the same level, don't have the same abilities, and come from different backgrounds, we have to use different approaches in our assessment of them" (FG1.9.42-44). The teachers argued that having used a variety of teaching methods during instruction, it was appropriate to use a variety of assessment methods to assess their pupils' performance in the classroom. One teacher maintained:

> The methods of assessment are to find out the results of the teaching...the methods of assessment will have to reflect their skills and your methods used in your teaching. So the children are familiar with whatever terms and conditions you're using when you are assessing them. Maybe you shouldn't teach them in one way and then you go and assess them in another way. (IT2.2.30-33)

The teachers, collectively, advanced several reasons for using a variety of assessment methods. They commented that use of alternate assessment strategies allowed individual pupils to display performance in a variety of skills and activities at different levels of proficiency, and provided for different levels of challenge and collaborative as well as individual samples of performance. They suggested that through alternate forms of assessment, it was possible to assess pupils in situations where they, the pupils, experienced less anxiety. They said that using a variety of assessment methods allowed teachers to compare and confirm pupil performances and provided information for report writing and general decision-making about a pupil's progress. All agreed the results of their assessments were used in their instructional planning. Lastly, the teachers agreed that the use of a variety of assessment strategies was particularly needed at Grade 1 given the pupils' inabilities to read and write. One teacher, reflecting on her reasons for using a variety of ways to assess her pupils, depicted the essence of these reasons:

> I know that with the children in my class, different activities will bring out different things from them. Based on their home environment...reading might be taking place in this family, but no reading...in that home. Much is going to be achieved by one child over the other in the reading area. Where children who cannot read and cannot do anything else yet, they can talk to you about whatever...in assessing them, not all can read, but all can talk to you. During class...we do a lot of drawing too. We can mime...we can dramatize...we can match...we can do things...we can let them just tell us in free speech. Discussions will bring out the oral child. So we use them all to teach and to assess. (FG1.22-23.41-45, 1-14)

This teacher provided for the pupils' various abilities and levels of performance through the use of different methods of assessment. She knew that her pupils came to school with different experiences and home backgrounds. Her assessments allowed for both readers and non-readers. Pupils who could not read could draw, mime, dramatize, match, make and do things, and speak.

While all the teachers indicated using a variety of assessment procedures, they identified and talked mostly about those that were most prevalently used. These assessment methods included testing, questioning, observations, and performance assessments. Each of these assessments is discussed in what follows. However, more attention is given to testing. This reflects the finding that, during the interviews, the

teachers provided more detail on their use of testing than on their use of any other assessment procedure.

Testing

Reasons for using testing. Typical of all the teachers interviewed was the view that, "official assessment is testing" (IT2.4.9). Asked why, one teacher put it this way, "The most famous one is our main problem. It's not our fault. It's the Education Officers...they want to see marks. And the only way to do that is to give them [pupils] paper...written tests. They want to see marks at the end of every month" (FG2.8.26-28). The view that tests are used to assess Grade 1 pupils because it was a requirement by the Ministry and the school was supported by a second teacher, in her first year of teaching Grade 1, who argued:

> I think it's (testing) mainly what is required by the Ministry of Education and also the administration of the school. I find that I'm...what I'm trying now to do is to learn the ropes first, then I will know how far I can go out of bounds. Basically, I'm trying to stick to what I am supposed to be doing now since I am a new kid on the block. Then I will be able to find a way to go around some of these stringent measures that we have to use. The Ministry requires...testing at the end of...each month, and testing at the end of each term...and then a major test at the end of the school year. (IT4.9.16-17, 19-23, 30, 32)

Another of the teachers' reasons for using tests to assess their pupils was because it was customarily done. One teacher declared:

> I don't think the teachers know why they always test. I tried my best to find out from two, and they...and they kept telling me that, this is how we used to do it. And this is what we used to do. And...this is what we have to do. (IT7.11.2-4)

Referring to other reasons for using tests at the Grade 1 level, one teacher indicated, "...you have to give some sort of test...to be able to assess the child...to grade the child...to produce a grade for each child" (IT7.5.32-35). With this grade, at the end of the academic year, the teacher was able to "...look at their (each pupil's) performance in the class to promote them at the end of the year" (FG2.11.37-38). They used end of year test results to make decisions about promotion, streaming, and retention. Based on these final test scores, this teacher decided that "...because they (some pupils) are still young and they are not ready, you usually repeat them, give them another year and make sure they're ready before we put them on to Grade 2" (IT2.24.45-46).

However, tests which were used during the academic year, such as term or unit tests, served a different purpose: placement into instructional groups. One teacher explained:

> We can evaluate them...because you have to say, well, X and Y are group 1 who don't know much addition or they are not doing it well....Then you try to help those, if you can. The other ones, you could give them work on their own, and so on. You can group them. (FG2.11.41-44)

All the teachers reported that test results were useful for instructional and lesson planning, sampling and tracking pupil performance and progress, and for reporting purposes. The following response is typical of the comments made:

> As much as I don't like end of term tests and mid term tests, they do tell you about their [pupils'] performance....The questions are on the paper, and when you go through the paper with them and you...read the instructions, and if they were able to fill in the answers, then it gave you...a picture as to whether or not they understood what you taught....I was able, from the information gathered, to plan future lessons and activities. I had to determine the grade to which my children would go to...and from the information gathered, I was able to determine the best grade...the grade I think would best suit each child. I think it's necessary to test them because you wouldn't be able to tell where you wanted to go from there with them and how to group them. I think that for testing, the main purpose...it's mainly for placement, and to do your reports. (IT5.7.43-8.1, 5-7, 18-20, 28-29, 32-33)

Frequency of using tests. Asked when testing was done, all the teachers who were interviewed said that the end of year testing was a practice at their schools. Typical of most of the teachers was the view that the year end test was "...the assessment that really matters" (IT8.4.13). As shown in Table 18, almost all the teachers (n=19) administered tests at the end of each term. Almost the same number of teachers, 15 and 16, also administered tests at the end of a unit or topic, and at month-end. Only two teachers said they gave mid-term tests to their pupils.

Table 18

Frequency of Tests

Class	When tests administered	No. of teachers (n=20)
1	End of year + end of term	1
2	End of year + end of units/topics	1
3	End of year + end of term + end of month	4
4	End of year + end of term + end of units/topics	1
5	End of year + end of term + mid-term + end of units/topics	1
6	End of year + end of term + end of month + end of units/topics	11
7	End of year + end of term + mid-term + end of month + end of units/topics	1

The distinction between the end of year and other tests was explained by one teacher, "In the first term and second term, we do our own informal testing. It's only end of the year that we give them generally, and it's official assessment and more formal" (IT8.4.10-11). Another teacher detailed the difference between informal during the term tests and the more formal end of year tests:

> What we have to do is…at the end of month test, we cut down on the amount of writing. We let them write number 1 to 4, and we say from number 1 to 4 you are going to write Yes or No, and you write the word "Yes" and "No" on the board. So you say, "Number 1," and you read it out, and if that is so, you say Yes, if it is not so, you write No. And that is how we have to do it. And for the Language and Phonics, we write it on the board, and they [the pupils] will copy it out in the hard cover book that they have for tests. That's for the monthly. But then the end of year now…have to be done on paper. And they are not accustomed to the typed paper. It is the requirement, so we just have to do it. (FG2.10.41-45, 11.3-6, 11)

One of the teachers who administered an "informal" test at the end of each unit said:

> I always give a test at the end of each...each unit. As they finish a unit, I give a test to see if I can go on...if I have to continue or revise. And so for the math, I would just...give them five questions or problems on the chalkboard, short questions for them to answer. (IT1.8.2-7)

Of the two teachers who reported that they used mid-term tests, one stated:

> We are expected to test them during the middle of the term as we go along and we are teaching our different subjects. We are expected to test them to see how well they are grasping the concepts and the topics that we teach them. So what we usually do is like you cover each topic you give a set of activities....Like you might give them a combination, if you teach them 'is' and 'are' and 'has' and 'have' and 'am' and so on. You might give them 5 sentences...you might give them all of those words and they are to use them. So they are to identify which sentence would require each word. And when they are through with that now, you'd give a grade for it because it would take in all the concepts you have taught for the month or so. (IT2.25.54-56, 26.1-6)

Test construction. All the teachers who administered end of year tests indicated that they followed a comparatively formal and systematic procedure in their construction and administration of the tests. Further, 10 teachers who administered end of term tests said that these tests were constructed and administered in a way similar to the year end tests. All other tests were more informal, less systematically-prepared tests.

The teachers identified three major test-construction strategies. Two of the strategies - senior teacher, grade coordinator or head of section with input from all Grade 1 teachers, and teachers working together - were associated with the construction of end-of-year, end-of-term, and mid-term tests. The third strategy - a teacher working alone - was associated with constructing and administering all other tests (end of month, unit, or topic).

The strategy most used (n=15) for the preparation of end-of-year tests involved individual teachers submitting questions based on what they had taught in each subject to a senior teacher, grade coordinator, or head of section, who then selected the items and designed the end-of-year and term tests. One of the Grade 1 teachers who was also the Grade 1 coordinator described what was involved in constructing the end of year test at her school this way:

> For our end of year test...what we teach, we write the questions and send them in. All the teachers in the grade have to submit questions to me. As the grade coordinator, you have to...you weigh the thing according to what each class has covered. And the marks are given according to...you don't just say five for each if it's 20, because some things are difficult and you have to give it more marks. And the questions are set like...you have the different kinds, like true-false, fill in, underline, circle, whatever. So you don't just give them one kind. (IT8.3.40, 42, 44, 4.3-7)

At a second school, one teacher commented:

> The end of year tests are designed among the teachers. I would submit my questions, the others submit theirs...they all go together and they pull out questions to come up with one final paper....The final questions...we send them to the senior teachers or Mrs. **** and the Vice Principal. They look at them, vet them, and create the common test. So you see, you might have questions coming from mine, but it might be only two. And the questions from Mrs. **** [points to one classroom] and Miss **** [points to another classroom], you might find that the bulk of the questions their children can manage because they're above these...so, with these little ones [pupils in this class], you find that the marks are way down. (IT1.18.17-27)

In both situations, the end of year tests were finally designed by a senior teacher. The first teacher, as grade coordinator, assumed the responsibility of compiling the submitted items, and making a selection based on coverage of work and representation across the Grade 1 classes. In constructing the common test, she considered the weighting of questions based on their difficulty level and the spread of test formats. In contrast, the second teacher implied that the test content disproportionately favoured the senior teacher's class. In the senior teacher's effort to represent all the classes on the tests, including pupils in the upper streams, the teacher said that pupils in her class (of a lower stream) were unable to respond to all test items. She later said in her interview that her pupils' resulting performance was consequently very poor compared with other Grade 1 classes. She added that the results on these end of year tests were often inconsistent with the other obtained in-class assessments conducted during the term (FG1.18.31-46).

The second strategy, mentioned by five of the teachers, involved a common, collective effort of all the Grade 1 teachers in the school. The teachers met as a group to write and edit the items for the end-of-year test. One teacher, drawing a comparison to the first strategy, expressed the opinion that this approach allowed for greater

representation of questions across classes, and a better chance of including test items with a wider coverage for pupils of varied abilities (FG3.16.3-4, 6-10). Hence, the teachers who had classes from the extreme ends in ability, that is, the high and low ability classes, were able to ensure the inclusion of test items which were appropriate for their pupils. One of these teachers described the situation at her school:

> For mid-term and end of term tests...we all come together, all the Grade 1 teachers. We come with questions that cover what has been done with the children in each class. Well, we usually come together...so if a teacher has not covered a particular area...sometimes there's a breakdown, but one test has to serve for all the streams in all the areas. We have six streams. If there is one teacher who has not finished everything, usually we would plan the test probably a week, two weeks before we actually use it...so that the teacher would have a chance to teach it. All the children did the same test...but sometimes it was simplified to go down to the level of the last stream. You didn't put like...I had the top stream and what we usually do sometimes...is not like everybody contributes to everything. So if I had the opportunity to make up the Math and I find that sometimes I would state a thing in a particular way, and my children would understand it... but I had to modify it because the ones way down the bottom would probably not understand it. Sometimes you find that you make the test too simple for the ones on top; it wasn't challenging enough. We did not do this gladly all the time, but it's something that you just had to go along with so that all the children had a fair chance. (IT5.4.17, 19, 24, 27-28, 30, 34-35, 38-43, 5.1, 4)

This teacher alluded to the importance of constructing and administering a test which was fair to all pupils based on instructional coverage and the abilities of the pupils. This was possible when all the teachers within each grade were engaged in designing the common tests to be administered to their pupils. She did, however intimate that although a suggestion was made to prepare separate tests for each stream, it went unheeded by the school administration. The teacher argued:

> Although doing a different test was suggested...it was the school policy to do a common test right throughout.....I think room should be given for me, if I have the top group for example, to sort of make a test that would best suit the children at that level. Meanwhile, the teacher at the bottom should have the freedom to test those children where she's at. Most times you find that you're pressed to, especially with the ones further down, even those at the top, you're forced to rush things because you want to keep up and you have to complete...by a given time, and you find that...I don't believe after assessing sometimes it gave you a really true picture as to what you wanted to find out. Because as I said, the tests were set below or above the standard, and I don't think that sometimes it gave you...a true

picture of the class as a whole or the individual's performance. (IT5.5.6, 8.43, 9.1-8)

The third test design strategy, mentioned by all 20 teachers, involved teachers working alone. This strategy was employed when the teachers were testing their own pupils in their own classes, and included monthly and end of unit tests, or typically any test that was not administered as a common test to all Grade 1 classes. One of these teachers said, "We do tests in between to see how well they are progressing; those who are moving on, those who are still lagging behind, those who need a little brush-up here and there" (IT2.4.11-12). Another teacher argued, "...the monthly test that is given by each teacher is not so much to give the children a grade, as it is to see what they are learning, so you know how to plan for them" (IT7.10.18-19).

The teachers were asked to talk about the factors that they considered important while constructing tests. Analysis of the teachers' responses indicated that teachers felt the following five test specifications should be considered when designing tests: (a) coverage of what was taught, (b) number of items on the test, (c) item format, (d) item difficulty, and (e) item weighting and scoring. One teacher made the distinction that while adherence to these specifications applied to constructing commonly administered tests, such as those at year-end, it was not necessary for an individually prepared classroom teacher's test to adhere to such "requirements." The teacher described an example of her own end of unit test:

> I always give a test at the end of each unit. As they [pupils] finish each unit, I would set a general paper...the same sort of thing for pattern practice or phonics. I would set a general paper in class. Sometimes I would just...I wouldn't give them a paper like the end of term test, I would just give them like five questions on the chalkboard...short questions for them to answer....Sometimes I would just set work, and I would move around and observe them at work....And what I observe is to see if...those children who settle down to do what they are doing, and if, and those who come up with the...correct answers, and to see if they understand the instructions that they have been given. Then I record when I look at the responses that I get. And I would see where this child might not complete or didn't start or anything. I would call the child and say, "Listen, why didn't you do so and so? Or, Did you understand so and so?" Now, if the child did not understand, then I'll know that the work...either my teaching wasn't good, or he wasn't listening. Then I'll be able to do some corrections. (IT1.8.2-7, 10-11, 17-21, 24-28)

All of the teachers interviewed indicated that they attended to the five specifications for end of term and end of year tests which were constructed and administered to all the classes in Grade 1. When the teachers designed end of year tests for their classes, they all said it was important that the content sampled on each test was representative of what was taught. One teacher argued that when there was variation in what was covered, the teachers included sections that were class specific. The pupils were then directed to complete sections which were relevant to them.

Another teacher said that at her school, the required number for a mathematics or language arts test ranged from 20 to 25 items while the required number for the science test ranged from 10 to 15 items (FG1.19.35-39). Decisions about other test specifications such as item weighting and format were the consideration of one teacher who said:

> Yes, you have to weigh the questions according to what each class has covered. And the marks are given according to…you can't just say 5 for each…because some are difficult and you have to give those more marks than the others. And the marks will vary because the questions are set like true and false…you have different kinds like true/false, fill-in, underline, circle, whatever. So you don't just give them all questions of one kind. (IT8.4.3-7)

A second teacher described the allocation of scores to test items, and how this was influenced by the difficulty and format of the test items:

> The tests are usually marked out of 100, and…the end of term test had to have 25 questions for each subject…and because the grade was 100, each question was worth 4 marks each. I think sometimes…sometimes we sort of gave marks according to the format and the difficulty. It was either 25 or 20, not more or nothing less. You couldn't go over 25, and it couldn't be under 20. So you just had to work your way around that somehow. (IT5.5.8-9, 13, 15-16)

One teacher made the observation that attention span for many of the pupils in her school dwindled after the first five items of the test. In an attempt to correct the situation and to accommodate the pupils, the teacher said the test was administered in two parts, "We did it [end of year tests] in two parts…like we give them the Structure questions which was about ten, separate from the others, in one part. And we put Phonics and Study Skills…like another ten in another part" (FG1.20.1-3

Test administration. Generally, the teachers who were interviewed administered all of the tests to their own classes. Only in one school did the teachers administer tests in classrooms other than their own.

In attempting to meet year end test administration requirements, four teachers indicated that they tried to prevent copying and working together by moving pupils to other seats. One of these teachers said:

> Sometimes I have to shift some of them in my class because you have some of them just like teachers. If they look on the other's work and see they're not doing the thing right, they start to help them...so I have to shift them and put somebody else at this particular seat. And I have to say, "It's time for you to work on your own. I want to see if you can work on your now." So I move them from their seat to another one. (FG3.10.20-26)

A second teacher said, "I change them around. For the tests you just have to keep changing them around, and group them different" (IT8.3.13-14).

Attempts were made to reduce the difficulty imposed on the pupils sitting tests, especially the non-readers, by reading the test items for the class in all but one of the 11 schools in which the interviewed teachers taught. In those classes where test items were read, the pupils who depended on the assistance worked along with the teacher throughout the test. The teacher read each item stem first, then each response option. The pupils then indicated a response either in test books or on test papers. A teacher of one of these classes said:

> What we have to do is...we cut down on the amount of reading and writing they have to do. We let them write number 1 to 4 and we say from number 1 to 4, you are going to write Yes or No and we write the words Yes and No on the board. So you say, "Number 1" and you read it out and, "If that is so, you write Yes, if it is not correct, then you write No." And that is how we have to do it. And for multiple choice...we don't give them much...we let them choose the answer from two options... (FG2.10.41-45)

Most (n=16) of the teachers who read the test items and responses for their pupils said it was very time consuming. However, the teachers indicated that they continued the practice because they were convinced that it provided a testing condition which was fair for all pupils:

What we do when we do our testing…we generally read every item for them [the pupils]. We do that even for those who can read. They will go on, some of them, but we read verbally for everybody. We ask them to touch the first word…that…that…that, and then we stop and they finish it up. Then we ask them to put their hands up when they finish. That is why their testing takes much longer than the others. We do that with our grade. But even when the school exam time table says from 9:00 to 10:00 you have language arts, so from 9:00 to 10:00 you have phonics, and from 10:30 to 11:00 you have math…our phonics sometimes takes up from 9:00 to 10:30 because we read it to them. We go over it with them. We wait until they have responded, put in the answers, and all that. So when other people have finished with their sets, whereas they move at a different pace and we have to guide them [the pupils] with it, they'll take the whole morning, maybe the whole morning to do one test because we are reading one item after another item. (FG1.25.2-15)

Eleven of the 16 teachers who administered monthly tests indicated that during the first term of Grade 1, and especially during September through October, they were less inclined to administer monthly tests. While the GRI was administered in September/October because it was a requirement, these teachers felt that during the first term, the Grade 1 pupils were not ready to take a test. Seven of these teachers found it helpful to introduce their pupils gradually to different test formats through practice exercises on the chalkboard in class (FG3.3.2-4). Pupils practised circling, underlining, shading in, and crossing out responses "…because later on down the line…they will be faced with tests, so they need to get the practice earlier" (IT2.21.6-7). While one of the teachers indicated that her pupils also needed to be familiarized with typed print, she was unable to provide them with typed worksheets because of the cost. Instead, she used exercises from workbooks as a solution. Another teacher used the chalkboard:

We don't place enough importance on it, you know…because generally, in class you give the child the work on the board. The child is accustomed to the work on the board. On the test paper, the child might not be accustomed to that print, and for some reason or other, the child might just not really understand it from the paper. I put it on the board the way he is used to seeing it…I don't think anything is wrong with the test, providing that they get enough practice. If only we had the materials to give the children more practice using the typed paper, then it would be fine. (FG 2.9.43-45.10.1-4,17-20)

Given the likeliness that tests will remain the dominant means of assessing pupil performance, 10 teachers who were interviewed recommended that ways be sought to improve their skills in test construction, especially in preparing end of term and year

tests. Six of the teachers recommended that, aside from the GRI, just one test be administered, and that they be at the end of Grade 1. Another eight wanted to know how they could continue using a variety of assessment strategies, each accompanied by more systematic procedures for assessing and recording pupil performance.

Questioning

The next most common form of assessment was questioning. In describing this form of assessment, the teachers used two other terms: oral assessment and discussion. In this section "questioning" subsumes all references the teachers made to oral assessments and discussion. While all teachers provided many reasons for using questioning as an assessment procedure, they said it was more effective and typically used during a discussion, along with a checklist, or with observations.

Reasons for using questioning. All of the teachers expressed a preference for using questioning as a means of assessment at the Grade 1 level. They described questioning as being appropriate, useful, and convenient for assessing Grade 1 pupils, and, that they used questioning most frequently, particularly for formative assessment. One teacher commented:

> Definitely questioning!...I think because...even in the group, it is directed to the individual and he can give you what he feels, and you know it's a true answer from him...It is quick, on the spot and convenient. From there also, I can say, "No, your answer is not correct. Can somebody else give an answer?" And if you can't get all the answers, then you know, you...are able to do something about it. I think it's a way of getting a response from all children. All children can respond, even those who would not have been able to put...hand to paper and write. (FG1.25.45, 26.2-10)

All the teachers indicated that the most attractive feature of using questions to assess Grade 1 pupils was, "Most of the children...cannot write what they want to express, so they can tell you. And the shy ones...the slower ones, you can get...responses from them too" (FG2.3.31-33). While pupils spend their time in Grade 1 developing skills in reading and writing, all the teachers indicated that questioning allowed them to assess the pupils by methods which were not dependent on skills not yet mastered by all.

All the teachers said that questioning helped them in many ways. They indicated that they used questioning to develop a rapport with their pupils; interact with individuals, groups, or the whole class; gather information about pupils and their

experiences, previous knowledge, concerns, interests and abilities; assess pupils in an unthreatening and familiar situation; assist pupils in their language development, structure and expression; invite participation by all pupils; generate exchange of ideas and responses; and assess whether pupils were able to provide desirable and appropriate responses. One teacher summarized her use of questioning this way:

> We use questions before every activity and lesson....I do a lot of oral activity for some of the subject areas. We have a lot of discussions, questions, and so on. We do it for comprehension and language expression. We do it for social studies, and usually for religious education, poetry and listening, and phonics. We do it in all subject areas, but these are the main ones that we do a lot of questioning. Based on the responses we get from them, if they are the correct responses, we know they are grasping the concepts. Although it's used for the group...individuals will answer from the group. And so for each question, I might not ask the same child because then it would look like favouritism, so each child is given a chance to respond to different questions. It might be a different lesson, but each of them will have a chance to answer a question....And they're invited to discuss from experience...what they know. (IT2.27.28, 35-38, 41, 42-46)

A second teacher said she used questioning in Grade 1 because it allowed her to respond and provide feedback immediately and spontaneously (FG2.7.36-44). Questioning, she continued, allowed her to address different levels of thinking, encourage creative responses, distinguish pupils who understood from those who didn't, and encourage the pupils to participate in self check within a familiar setting (FG2.7.13-14, 17-18, 36-44). A third teacher indicated that through questioning, it was possible to become aware of necessary corrective measures to be carried out on the spot or in future lessons, and pupils who needed additional attention (FG1.26.28-32). The interactive nature of questioning, said a fourth teacher, was most appropriate for young children in Grade 1 as they enjoy talking about their experiences and what they learn (IT3.20.6-10).

One of the teachers pointed out that questioning allowed her to introduce and develop a lesson, and then to assess its progress at any time during the course of that lesson. The resulting information was useful for diagnostic, formative, or summative evaluation. This teacher described the usefulness of questioning at the beginning of a lesson:

> I use questioning...most of the time to introduce a lesson. Before I teach a lesson, I would like to know where the children are, so we talk a little about what we are going to be doing. We talk about things that might relate to it from their

experience, so that I don't start above or below their level. There are some children who are ahead of others, so we try to find a middle ground, based on what comes out of the discussion. For those children who believe that the discussion should be going at a more rapid rate because they already know the information, I have to help them to understand that there are other children who don't know what they know, so they have to give them a chance to learn too. So, out of the discussion I will find out what level the children are at and we move from there. (IT4.5.24-33)

When used as an introductory activity, questions helped the teacher to set the scene or create the context for the lesson and concept or skill to be taught. The teacher was able to discover the pupils' previous knowledge of the topic for the lesson. She used the pupils' responses to lead into the concept or skill to be taught or to provide the direction that the lesson would take.

After questions were used to introduce a lesson, they were also useful in developing basic principles, concepts and skills of the topic being studied. The teacher continued:

During the lesson, if I find that a child is not able to cope,...during seat work I'll take that child aside and try to work along with him....I'll walk around the class and see how well they're coping. If they're not coping...that is how questions and discussions are used during the lesson...I'll stop them in the middle of the lesson to talk. They don't like that really, but sometimes we have to...when I say, "Pencils down, let's talk a little," to find out if they are understanding what they are doing, or to point out certain corrections and connections. Sometimes they'll be doing something on the board...some activity that was set, and I will put the incorrect thing there and ask them if whatever it is is okay. And we'll discuss all that. So discussions and questions are on-going in the lesson. (IT4.5.36-45, 6.1-2)

During this "developmental stage" of a lesson, the teacher asked questions to clarify, exemplify, elaborate on, and provide additional information about the principles, concepts and skills being studied. Questioning was also used to explore related issues based on the direction of the pupils' responses. Responses to questions indicated pupil progress both individually and for the class.

At the end of a lesson, the teacher used questioning to assess whether the objectives were attained. As a summative activity, questions sought to confirm and reassure the teacher about the progress of the pupils. The teacher concluded:

> Questions and discussions are also used at the end of the lesson to find out if the objectives were met, if the children learned, if I need to reteach, or if I need to give individual attention to any child. All of this will help me to plan for the next lesson. (IT4.5.34-36)

Another teacher said that by the end of a lesson, as a result of questioning she was able to make instructional decisions pertaining to, for example, whether or not the class had learned what was taught, what was to be included in the next lesson, and the activities and teaching methods which worked well with the pupils. At the same time, she was able to identify the pupils who needed reinforcement exercises or follow-up attention (FG1. 26.28-32).

However, as with testing, the teachers also expressed reservations about the use of questioning as an assessment strategy. Ten of the teachers interviewed indicated that the main problem encountered in using questioning was the large number of pupils in their classrooms. They indicated that they often needed to use choral questioning because there was never enough time within the school day to question each of their pupils. A typical response was given by one teacher who said:

> Many times, you find that in your questioning, you are not able to get around to everybody. So sometimes you have to say, okay, for one set of questions, a few will...you will allow a few to answer and...not to let them feel any way. For another question now, another set answers and so forth, because you find that there's so much enthusiasm from the children when questions are asked orally. I find...everybody wants to tell you something and sometimes I find I feel so guilty when I am not able to allow everybody to answer. So sometimes I'll say, "Okay, for the next question, I will allow those others." But eventually, not everybody will have a chance to answer something. (FG1.26.13-20)

Another teacher explained that when the whole class was able to respond in repeated practice exercises, and random individual pupils were invited to again provide answers similar to those already provided by the whole class, there was indication that generally, the pupils had grasped the concept or skill taught (FG1.26.42-45). This teacher added that individuals who were unable to respond correctly were given follow-up attention at another time.

One teacher, who was concerned that there were always pupils who did not respond when questioning was used, said:

But I tend to call out to children whose hands don't go up because children's hands go up as soon you say, Who that? You'd say, "Okay, allow Peter to answer this time. I know that you have always been answering. Now, allow John to answer." And you give him a chance to answer. And if you ask him, and he didn't give you a response, then you say, "Okay, think about it. I'm coming back to you." You move around to others and come back to him. And you have those who don't answer at all. But it's not because they can't answer. If you ask them then or even later, they can give you a good answer, but they are never going to put their hands up. (FG1.26-27.42-45,1-5)

Another teacher argued that questioning (and indeed teaching and testing) focused on factual recall. The teacher saw questioning as having the potential for "higher level" (FG2.8.2) thinking and application depending on teachers who used "more open questions" (FG2.7.43). The teacher explained:

We ask a lot of closed questions all the time. But now, because we are hearing that you must make the children think at a higher level, we have to ask the children more open questions. So we ask, "What do you think about so and so?" "Why you think so and so happened?" (FG2.7.42-45)

Another teacher expressed concern about the inclusion of high level questioning for assessment purposes. She pointed out that only a very small number of children were able to cope with higher level thinking questions. She argued that allowances had to be made for a balance between the distribution of manageable and difficult items, that is, a representation of questions across different thinking levels (IT7.19.26-30).

One teacher said she was unable to keep a record of individual pupil performance when using questioning as an assessment strategy. She explained that when she did make an entry, it was not consistently done and not as detailed as she would have liked (IT2.27.28-32). However, another teacher who used questioning, employed a checklist:

But if you use it [questioning], you cannot write down everybody's answer...that is too much, you are talking about fifty children, you know. Okay, you do something like this...you ask question 1, and the person answer wrong...it is incorrect, question 2...3...4 and so on and you just make your thing and put a grade for every child. You don't have to write down all the answers...just right or wrong, a tick or an "x." (FG1.10.26-32)

This teacher described a systematic method of preparing a list of questions, then recording every child's response to each question (in this case, right or wrong, yes or no) in columns. However, she cautioned that conducting continuous individual assessment

through such a systematic procedure was not always feasible due to class size and timetable constraints (FG1.10.21-23).

Four of the teachers interviewed indicated that they found questioning more effective when used together with observations. This combination, one teacher said, was particularly useful during the first few weeks of the school year (IT8.2.43). She said that as the pupils adjusted to their new setting, she discovered much about the pupils by asking questions and watching them. A second teacher recommended using the combination intermittently each day while collecting information about the pupils' attitudes, social interaction, and behaviour (IT2.7.7-12). As the pupils participated in activities in learning corners, during free activity periods, or as they were engaged in group activities, she used questioning and observations simultaneously. Typically, she observed what pupils were doing, and then asked questions to assess how they were able to describe their activities, clarify issues, raise concerns, and make relationships. A third teacher said, when time allowed, she recorded snippets of information collected from the questions and observations. She said the information gathered also helped her to make decisions about grouping, activity placement, leadership, instructional and lesson planning, and behaviour management (IT8.2.14-15, 18-22, 28-30, 36-41).

Observations

Reasons for using observations. All the teachers who were interviewed indicated that observation, as an assessment procedure, was convenient, spontaneous, and appropriate for a class of young children. Typical of all the teachers' responses was that observation allowed for "assessing the total child...it is holistic assessment" (FG3.9.5-8). Asked when they used observations, all the teachers said they used observations to assess pupils throughout each day. They indicated that they observed pupils in and out of class (FG3.9.5-8), during academic and non-academic activities (IT1.13.8-24), and while pupils were aware or unaware of being assessed (FG1.7.8, 12). By observing the pupils, teachers made spontaneous decisions in response to the pupils' needs and was able to take immediate corrective measures where needed:

> We have on our timetables a period of free time where...the children are allowed to do various activities in the different corners like drawing, colouring, making things, and dressing up. For example, they have little wooden blocks, and we can see them putting them together to make toy trucks or cars or whatever. So we look

at them. We observe to see those children who can handle themselves well. Sometimes we find that there are some children who get into making things and are very interested in what they are doing. And there are some who would just sit around, and don't even know what is going on around them. So what we have to do is try to get them involved and say, "Come man...see a colouring book here and some crayons. If you don't want to colour, draw something or go and take something and play with it." Some children are not very sociable, and when they come to school they are withdrawn. We observe and see the ones who need our help. (IT1.13.8-23)

A second teacher provided this example:

A lot of times...through observation...a lot of it...sometimes they [pupils] are at play and you hear them playing back the same thing that was in the lesson. And you realize that they know and understand it. That one [pupil] might not give you book work, you know, they might not write...but you hear them and you see them, and you realize they really learn something. (FG2.16.11-17)

One teacher suggested that while observations helped to confirm findings from other forms of assessment, they also "...pick up..." what is excluded by the other methods (IT2.16.39-40). She pointed out that observations allowed her to be aware of those pupils who were experiencing difficulty in one way or another, or in need of immediate assistance (IT2.7.4-12). Another teacher said that when observations and questions were combined, they were most effective in assessing pupils who were reluctant writers (FG1.4.37-41). Interestingly, one of the teachers likened assessment by observation to recording performance with a video recorder, while other strategies (tests in particular) were snapshots by camera (IT4.3.3-9). This metaphor suggests that observational assessments were conducted on an on-going basis while testing was conducted at intervals.

One teacher expressed concern about the use of observational assessments without recording any information about the pupils and reliance on memory. She said that some information was lost when neither a list of criteria was used to guide observations nor jottings made (IT1.13.27-30).

Performance Assessments

All of the teachers interviewed indicated that they used performance assessments or, as many called it, "task performance" to assess their pupils. Performance assessment as defined by one teacher was, "when you have children perform or do something and

you observe them and...you have to assess them based on what they do" (IT2.3.31, 4.4). Other teachers provided examples of the kinds of tasks their pupils performed for assessment, which included colouring in pictures of objects, tying laces, hopping, doing an arm throw, threading beads or tearing paper, drawing pictures, making craft, singing a song, saying a poem, collecting and making sets of objects, and miming and role-playing.

Reasons for using performance assessments. Eight of the teachers interviewed, indicated that performance assessment was most appropriate for young children who were unable to read or write, or too shy to respond in class. One of these teachers argued that pupils in Grade 1 who were developing reading readiness skills needed to do activities that included hand-eye coordination and motor skills, and that performance assessment was the most appropriate strategy for assessing these behaviours at the Grade 1 level. While two teachers stressed the importance of matching objectives to tasks and having a methodical system to guide performance assessment, they said the effectiveness of this assessment procedure was adversely affected by class size, time, and class management (IT4.3.14-26; IT2.3.6-7). Three of the teachers recommended a combination of task performance and questioning or discussion. One of these teachers shared the following anecdote:

> I remember once, there was a child...the teachers told him that he was to do a rainy day at school. When he did it on the paper all you saw were just raindrops, raindrops, raindrops. And she said she felt like just taking that paper and crushing it. But something said to her, No. She called the child and said, "What is this?" Him say, "Miss, rain fall, fall, fall, fall and cover up the whole place!" ...the next topic was "Birds," and she asked the children to draw a bird. This little boy just gave her the paper. "Miss, him fly, fly, fly , fly...him gone far, far, far." When you look, you see one little dot. Now, how can you give that child an E? No, you can't give him an E. (FG1.11.21-26, 40-44)

This teacher explained that she used drawing as a culminating activity quite frequently. She said the pupils enjoyed drawing pictures which ranged from very time-consuming and detailed compositions to quick, haphazard ones. Generally, as pupils completed their drawings, she invited them to share their work with the class. The teacher argued that while the example above describes a child who was allowed to draw pictures at the end of lessons, the task by itself was inadequate as an assessment. She said by asking him to explain what he had done, she was in a better position (for the pupil's first drawing) to

know "...what he was thinking...because we wanted him to show a day when it was raining and that's what he did" (FG1.11.33-39). One teacher provided a description of her use of performance assessment this way:

> We can't usually do them all on the same day...because of the amount. We do them at different times, so we might do like 4 or 5 for a day...until you get through all. I get to do a task performance with all the children individually. If it's like PE, they have to practise the skills...throwing, catching, bouncing, over, under, in and out. Those are the concepts and skills that you trying to develop in PE. Each of them has to demonstrate and show me that they have grasped the concept or mastered the skill. (IT2.22.32-37)

She continued her description, distinguishing between the use of performance assessment during "exam period" at the end of term, and during the term:

> During the exam period, because it generally lasts for a week, I can only do a certain amount of them each day...and I would do some during the lunch break too. During the term, it's not done individually...more on a group basis...except when you'd like them to make individual models. But depending on the activities, it's done on a group basis. (IT2.22.42-43, 46-47)

When asked to explain what was meant by "a group basis" she responded:

> Well, if they're making some things, each of them generally participates. Let's say this group will make...like houses, or box trucks. Then they will come together, bring in the materials...everybody will bring in something, and this one will put this part, and the other will put the other part. They will make the model together in their group. So that's the group activity during regular class time. (IT2.22.49-54)

The teacher then described her assessment procedure:

> I use a set of criteria...I don't really use a checklist as such...it's something similar. I would say about 3 or 4 criteria...I don't really check for a lot of things which would be too difficult to mark...and then I allocate scores to each. (IT2.23.5, 13-14, 17)

Grading Practices

After the teachers had described their assessment practices, they were then asked to describe how they graded the information they collected. Generally, the information gained from the assessments conducted during each term was in the form of test scores and anecdotal records based on what they had gleaned from their oral, observational, and performance assessments. For the teachers who were interviewed, grading meant the

interpretation or representation of this information in the form of a summary numerical grade or a letter grade. These "short" forms were often accompanied by written brief statements containing a verbal summary of the pupils' performance.

All 20 teachers indicated that term grades and comments should be based on the work completed and, when used, the unit and monthly as well as the end-of-term tests. They argued that by doing so, the grade and comments would better represent the holistic development of each pupil. One teacher commented:

> I think that work...classwork, homework or any work needs to be graded and be accepted as a true reflection of the child's performance. During the time of tests, you find that many children...because you know that they can do well...but when you get the result, it's pure foolishness. Now, for those children, I don't...we don't give them...I couldn't give them a failure grade. Now, based on what was done during the term, you can average a better grade that reflect the child's work. You can refer to class work pieces. You know that the child has the ability, but during the test...end of term test, very little was done. And you know it's not because the child cannot do it. Now, I call upon what...what I know from their past. How the child responds in class, how the child did the work...but you already know...you know, you know. All right...how do you know? It's from information that you memorize about the child too. (FG1.18.13-32)

Generally, the 20 teachers indicated that they used end of term test scores to "confirm" the grades they had formulated from the assessment information collected during the term. They pointed out that for most pupils, there was close agreement. For those pupils, the end-of-term test scores were converted to the final numerical grade and corresponding letter grade (11 teachers). When the test scores were not congruent with the within term grades, the teachers took one of two steps. Three teachers calculated the mean of the two grades. One of these teachers justified her use of the mean in the following way:

> When I give her the actual mark for the exam, and it's a failing grade....I average out that mark with her class work mark...and get a grade for her, because...I don't think I should give her the failing grade from the exam because she just never completed the test...and it's not that she couldn't do it. (FG1.18.44-45, 19.1-2)

The remaining six teachers "formulated a final grade" that was what they believed to be a more accurate reflection of within term performance. One teacher commented:

> To be honest you know, when I see the...end of year test...and what the child has done. I know that I had that child for the whole year, and I know that child is better and can do better than what he got on the test. I don't give him that grade. Honestly, I don't set down that end of year grade because I know that that is not his real ability...I just decide...this is what the child has been doing over the year, and I know this is where the child should have reached...so I give a grade. I just give a grade. And I do this with all of those who I need to....At the end of year, your grade shouldn't be worse than the grades you have coming all along. They should be better or on the same level. That is what most of us do in Grade 1. (IT1.18.31-35, 38-40, 42-44)

As indicated earlier, the numerical or letter grade for a term was accompanied by an explanatory written comment. All of the teachers indicated that this was necessary. One teacher provided the following example:

> I have A's, and I have A's, and from time to time...somebody will take up a child's book and say, "How this child make 85...and you write 'disappointing result'?" I say, it is disappointing in my eyes, because I know the child's capability. And you might look at something and see a child get 30 or 35 and you see "very good," "well done," smiling face, stars, everything. I mean, no...you don't know where that child is coming from. This child reach. This child reach somewhere and it took him long to get there. (FG1.7.20-26)

Here, the teacher was using comments to reflect differences between the grade a pupil received and the "expected" grade or potential of the pupil. A second teacher provided the next example:

> As for the child who...has made an effort to complete the paper, there might be questions that the true response that the child wanted to put there doesn't really get on the paper, but as one says, you can read between the lines sometimes. And instead of taking off so much marks...you would just try and give the child the marks for the concept or the content that they have put there. Because each teacher knows what the child is capable of doing. (FG1.19.27-33)

Here, the teacher was pointing out that while relative to the class a pupil may receive a lower grade, he did nevertheless make progress. In this and the former case, a combined norm-referenced (relative to class) and ipsative (relative to self) comment was made.

Lastly, all of the teachers felt that grading pupils in Grade 1 was either inappropriate or unnecessary. They suggested that a lot of time was wasted in devising grades or providing a grade to represent pupils' performance or progress. The teachers questioned the relevance, appropriateness and efficiency of tests, and the grades that

resulted from instruments of which the design, administration, or both were questionable. One teacher had this to say:

> For me, passing and failing in grade one is not as concrete then...made in stone, as it would be for a Grade 4 child or probably even for Grade 2. Simply because in grade one, you're talking about the readiness of each child...how alert the child is, how ready the child is for school. Right? And you are also preparing that child to be ready to move on in the school system. So passing and failing...don't mean anything...the child is either ready or not ready for school, and if he is not ready...we need to help him. (FG1.12.28-34)

Record-Keeping

All of the teachers who were interviewed kept a written record of the information collected from the assessments conducted during and at the end of term. This information was recorded in lessons books or lesson plan folders, mark books, data books, and registers. Lesson plan folders or lessons books contained lesson plans which ranged from extremely detailed daily plans to brief fortnightly prepared outlines. Test scores, observations, comments, and outstanding occurrences were recorded in teachers' mark books, data books, and registers. Anecdotal entries varied from jottings on pieces of paper to detailed, dated journal narratives. This recorded information was all a collection of sources to which teachers referred when they prepared reports, transcripts, and for parent conferences on their pupils' performance and progress. One of the teachers commented:

> I keep a record...and then I go back to the records that I have there...individual records. And like I have been observing each child, questioning the child orally, look at the grades...at the work. How alert the child is. How he is in his individual reading test, and I write them down. (FG2.14.21-23)

All of the teachers were required to enter term or year end grades and summary remarks in each pupil's cumulative record or file. These records, which were kept in the school office, were referred to when transcripts were requested. One of these teachers said:

> Once a year...what we do is...we should really make entries at the end of every term, but to be honest, sometimes you haven't got the time to update those records and to go through every child. So, what we do is, that you have all the information in your marks book. So at the end now, you have to prepare reports as well, so you just transfer all the information to the cumulative records and pass that on to

the other grade teacher. So when the child is leaving Grade 1, the child leaves with her cumulative record on to Grade 2. (IT1.10.26-31)

All of the teachers indicated they relied upon their own memory for information on their pupils. Indeed, they also referred to making intuitive decisions throughout each day. One teacher said such decisions were spontaneous and resulted from "...a mental picture of each child...something that you develop as a teacher...something there that help you to know each of your children and their needs" (FG3.13.18,22-23). There were not enough hours in a day, teachers said, to prepare a written record of information gained from oral assessment and observations. Much had to be stored in memory and made available in the short term for daily reference for instructional decisions and lesson planning and, in the long term, to prepare the written summary that accompanied the numerical or letter grades. One teacher commented:

> I keep track of the children...you have to have a checklist or a piece of paper while you walk around the room. And sometimes by memory...a lot of times by memory. Most times, I think. I use a mark book too...monthly. You write something about the child, whether the child has improved or whatever, so that at the end of the year when you are writing up your report, you don't really have to go on memory alone. You have something there to refer to. I usually have a page on each child or...if the book is long enough, you can divide it up in half. I write on his behaviour, his work...and punctuality as well. (FG2.4.12-41)

A teacher from another school described the recording practice at her school in the following way:

> We write down the grades from tests, on the different assessments whether it be through class work, end of term tests, whatever. And we have what we call a data book that we put data about the child, because you might write, "In September, this child doesn't show any interest in work" and so on. It's supposed to be daily or as often as possible. But sometimes you just get...sometimes it builds up on you, but any little thing that happens during the day with a child, if it is very blatant, then you know...whether the child got hit by somebody or the child is weak or if the child hasn't settled down yet, the child is able to read and write properly, participates actively in class and so forth. Now, it is easier now to just look at the data book when we are ready to write the end of year comments on your reports. I do that for each child...each child. And sometimes, you just sit down and you just picture, remember, you just focus on the child, because sometimes I just bring the child to my mind's eye and make my comments. (FG1.32.1-11)

Uses Made of the Information Resulting from Assessments

The 20 teachers identified five uses of the assessment information they gathered: 1) to make decisions about instructions and lesson-planning, 2) to decide on the selection and placement of pupils, 3) to inform and update teachers and school administrators on the pupils' performance and progress, 4) to inform parents and care-givers on their children's performance and progress, and 5) to prepare report cards and cumulative records.

Instructional decisions and lesson-planning. When the teachers prepared their lesson plans, they referred to the assessment information entered on the lesson plan from the previous day. Decisions about whether to repeat a lesson, change a set of activities, extend a list of vocabulary, take in objects for a group, call on specific pupils, create new groups for free activity, or change around the class seating arrangement were influenced by this information. All of the teachers indicated that by using this daily assessment information, they were better able to meet their pupils' interests, abilities, experiences and concerns.

Promotion and retention of pupils. All 20 teachers referred to their records for decisions, usually reserved for the end of the academic year, on retention or promotion of pupils. Pupils were also identified and selected for awards and prizes. Due to the potential, long-term significance of such decisions, which sometimes resulted in the need to justify and provide evidence for actions taken, one teacher said it was necessary and convenient to have detailed documentation on all pupils and their performance. Three of the teachers described the situation in each of their schools:

> Well, when we are sending them on to another class, we don't just only base the promotion on the test result. It depends on how the child performs throughout the year...throughout the year. And so we have to take everything we write down into consideration. (FG3.3.42-44)

> If the child is not ready...if the child has to repeat...and generally, we don't stream them. They move up. But those who are not ready, you really say, boy, it don't make sense you send this child to Grade 2...You'll keep back that child, but you have to have good reason to back up your decision. (FG1.12.33-34,38)

Yes, we look at the results, we look at the results and we look at what we have on the whole performance in the class to promote them at the end of the year, and for prize giving. (FG2.11.37-38)

Informing school administrators. While all teachers were required to make cumulative record entries at the end of the year, only two of the teachers said they prepared an additional report of the pupils' performance for either each term or the academic year and submitted it to the principal. One of these teachers described the situation at her school:

> I have to give her [the principal] a report as to what we are doing, and where we are in Grade 1....We have to give her a report especially on the children's reading and mathematics levels....We have to give her a written report at the end of each term, and what she does, she compares them...across the terms and the classes. (IT1.4.40-46)

Informing parents and caregivers. All 20 of the teachers indicated that they reported to parents and care-givers about their children's performance and progress, particularly at parent-teacher conferences. When asked, all the teachers reported that almost all parents/caregivers attended at least one of the parent-teacher conferences held during the year. One teacher said, while some parents and care-givers saw their children's teachers more frequently than others, it was always convenient to have the written anecdotes and recorded grades for reference. A second teacher said:

> Yes, I find these parents to be very supportive. We had our first parent meeting last week Wednesday, and we had...almost 100 parents from Grade 1 alone. And it was for a 1:00 o'clock meeting. You know, if it was a little later, then we might have had a better turnout; and it was raining as well. Some called and apologized because they just couldn't get the time off from work to come....We decided to do a little change with the time for the next meeting. So we asked them...those who were here Wednesday. And they said a Sunday afternoon would be better as they all wanted to come. (IT2. 8. 18-27)

Report cards. All of the teachers indicated that the purpose of report cards was to inform parents and caregivers about their children's performance during the reporting period. Although generally the reporting periods corresponded to the three terms of the year, in three schools report cards were prepared biannually. There was one teacher who provided one report:

> We send home a report once per year...at the end of the year. We usually do it at the end of the term, but we find it very difficult to get them ready. And paper is expensive, so each time we have to ask the parents for a contribution towards paper cost. So we all came together and decided, why not just send one report at the end of the year, with all three terms' work on it....The last school year...some modification was made to it. It wasn't catering to the little ones....On the report now, you have the area for academics, you have the area for extra curricula activities, and the various clubs, whether the child is involved in Brownies, Savings, 4-H, Cub Scout...whatever. So you have each area, and if the child is good in that area, you can make a comment beside the grade...whether the child was good or the child showed interest...or whatever (IT1.10.41-46.11.7-12).

The report cards contained numerical or letter grades and comments which reflected the teacher's judgment of each pupil's performance for the reporting period. One teacher said the report card gave parents "...a glimpse of...definitely not all and certainly not enough...but a glimpse of what their child is doing...and how the child has performed throughout the year" (FG3.14.11-12).

Fourteen teachers indicated that the information provided in a pupil's report card was meaningless, primarily because of inadequate space for comments or explanations. One teacher pointed out that the grades and teachers' comments often did not correspond. She provided an example where a grade of 83 was accompanied by the short remark, "Can do better," and suggested an explanation was needed to explain the apparent lack of correspondence (FG1.7.21-26). Another teacher criticized the use of codes which represented comments summarizing her pupils' performance which were inadequate (IT2.8.7-13). This teacher indicated there was a need for improved reporting procedures and a modified report card in her school:

> Now I am here, I have to be dealing with numerals. I think I used to enjoy the descriptive form more because then you'd get into detail. You would not just put down a grade and make one little comment. We used to explain in detail the specific problem that you find with the children. If they are having number and letter knowledge problem, you know that child is unable to recognize numerals or the child is able to recognize numerals, you specify...the child can count such and such numbers, and so on. Those are the specific things we used to write. Now we only write numerals. The child gets a grade, and you write a little comment...like "You need to work harder" or so on. The space isn't there to be more specific (IT2.7.28-39).

While eight teachers expressed a preference for detailed report writing on each pupil, they were aware of the increased demand in time and effort for such a reporting

system. It was, these teachers argued, more informative and appropriate for the purpose intended. However, one teacher pointed out that despite the presence of comments, however limited or detailed, parents/caregivers emphasized grades and interpreted their children's performance exclusively by grades (IT2.8.27-30). She suggested that the school had a role to play in sensitizing parents to a more inclusive understanding of performance and its assessment (IT2.7.26-45).

Assessment Practices—Influences, Observations and Recommendations

Factors Which Influence Assessment Practices

The teachers indicated four factors which most significantly influenced their assessment practices. They included the teachers' personal and professional experience, the school curriculum, Grade 1 pupils' characteristics and learning needs, and the NAP.

Teachers' personal and professional experiences. According to the teachers, the experiences that influenced their assessment practices were not limited to those as a teacher in the classroom. Indeed, many of the teachers who referred to their experience, did so upon reflection of instances as a child or student being assessed in school. Unfortunately, the teachers' shared experiences of being assessed were mostly unpleasant memories:

> What has influenced me in how I assess...some of the things are too embarrassing...sometimes deep inner...you don't want the same things to happen to others. You have been teaching, and out of that experience...it's just something spontaneous. (FG1.30.16-19)

Professional experiences which influenced the teachers' assessment practices included in-service workshops and seminars organized by the Ministry of Education & Culture; pre-service preparation, particularly the CTM course; requirements of the Ministry, the education officer and school administration; and other teachers. One teacher said, "Everything combined...workshops, training, experience. Primarily the requirements from the Ministry...the principal, books and workbooks" (FG3.14.38-40, 44-45). For another teacher:

> Well, I think a knowledge of...definitely being exposed to "Testing and Measurement" as a subject gave me the...what should I say...allowed me to state the questions. It gave me ideas of the best way of questioning and assessing the children. I found that when I went to [name of school], a lot of tests were

used...and everything was in one format. And I was able to say, "Look here, you can't put everything like this. You have to mix it. I was able to do this, and it went over very well because I don't think many of the teachers were exposed to doing matching, completion and all that. They were used to doing just one format. (IT5.7.5-11)

The school curriculum. Several of the teachers identified the objectives, content and teaching methods of their lesson plans and the curriculum for primary schools as factors which also influenced their assessment practices. Unit and lesson plans of the primary school curriculum included recommendations for assessment. Also, when teachers within each grade planned their lessons together, as was the practice in several of the schools (see Chapter 4), decisions for assessment were influenced by the objectives, content and methods of each lesson, as well as the assessments recommended by more experienced, and other teachers.

Pupil characteristics and learning needs. Several Grade 1 teachers who were interviewed had many years of teaching experience across the primary grades (see Table 17). Consequently, they were able to identify a number of characteristics specific to pupils in Grade 1 that influenced their assessment practices. They included the diversity of the children's backgrounds, stages of development, interests, and abilities. All of the teachers commented on the importance of children's language development at the Grade 1 level. They underscored the importance of daily instructional planning which was sensitized to and provided for their pupils' language needs, particularly in Grade 1 . Through their response to those needs, teachers felt that a significant part of their daily routine was spent in engaging their pupils in oral assessments.

Most of the new pupils who were entering primary school, would have attended a variety of basic schools or infant departments or schools. The emphases of each curriculum were evident in the performance of pupils as they participated in the beginning activities of their new school. According to the teachers, the differences in the ways pupils were taught were noticeable as they applied themselves in given tasks and activities (FG2.13.2-5).

NAP. One of the teachers, who was the school representative in the National Assessment Programme, identified workshops and seminars as having had much influence on her assessment practices. Other teachers were not as up to date on

assessment matters and information disseminated at the NAP workshops and seminars. They attributed this to either a breakdown in communication within their own schools or neglecting importance placed on the GRI. One teacher felt that it was important for the more experienced among them to provide some form of orientation for teachers new to any school (IT7.18.15-24). Another recommended that such an orientation should continue for the duration of that first year of teaching the particular grade. The school-based assessment coordinator was identified as an obvious person who would provide an orientation for new Grade 1 teachers, particularly in the area of the GRI.

Concerns Raised by the Teachers

There were three concerns raised by the teachers. They were an increasing occurrence of behavours related to test anxiety, a more noticeable number of pupils who display test wiseness, and pupils' performance results as an indicator of teacher accountability.

Test anxiety. Another concern, shared by eight of the teachers interviewed, was the increasing occurrence of test anxiety among their first grade pupils. One teacher commented that in her school, where testing was done on a monthly basis, the teachers observed signs of pupils experiencing anxiety in anticipation of the end of month test. Another teacher said similar observations were made, at her school, during the days preceding the end of term test. One teacher described the situation this way:

> By the time the tests come around, they realize it's something important and they get nervous. Some of them cry for headache and tummy ache. Some of them even cry that their hand hurting them and they cant' write. And they don't want to do anything. Some of them just start crying, crying, crying, and just sit there and can't do anything else. (IT2.25.12-15)

These teachers indicated that absences were noticeable during the week of and the one before testing began. One teacher said that in her school, relaxation activities such as breathing exercises were included in the teachers' instructional plans for the week preceding testing (FG1.18.4-5). In another teacher's school, as the end of term tests approached, in addition to revision exercises, the teachers deliberately took their pupils outside for outdoor activities more frequently. One teacher, who felt the need to reassure her pupils that the test would be manageable and that all would be well, shared the following:

Before exams I have to be relaxing the children, reduce the anxiety, yes, and doing revision with them and talking about it [tests and their content]...to comfort them. I had a child in class. She participated in class. She was very intelligent. You ask tricky questions and she would come up with the answers. You give her class work and she would complete it. And every time we had end of term tests or any test, she cried straight through. She cried straight through and trembled straight through...when you call her and say, "Why you crying?" "Miss, is test and a fraid." (FG1.18.4-5,32-38)

Test wiseness. One of the teachers found that several of her pupils were able to guess their way through tests. She found that those pupils did much better on their tests than in written exercises assigned in class. She referred to their ability to do so well on tests as having common sense and street knowledge. In her reflection of one of one of her pupils, she said:

I know pupil A cannot read so he is not going to be able to read to put the correct answer there, right? And then, pupil B, who can read, reads through it, figures it out in his way. Pupil A just uses his logic, his common sense that he has to use to get through his everyday life, saying like his street knowledge to find the answer quicker than pupil B. (FG1.9.35-40)

Accountability. Finally, six of the teachers commented about the assessment and reporting of pupil performance and their relevance to teachers and what teachers did. They believed that pupil performance, as reflected by various assessments, was a reflection of the quality of teaching and learning that took place in the classroom. With reference to these views, one teacher had this to say, "Whatever grade each child gets...to me, it's an assessment of the teacher. Because if the grades are not...the children's grades are not excellent, it's as if you are not doing anything" (FG2.9.10-11). Another of these teachers said:

To me it's (testing is) an assessment of the teacher....Because if the grades are not...the children's grades are not excellent, it's as if you are not doing anything....I have a child in my class from September, and now it's February, the child...I am there trying my best. I have 50 children and there I am trying my best. Twenty of the children, they can function, and the other 30 not writing or reading well. And you give a test. And they are telling you that you are not to read the test. The children must be able to do the test. How can they do the test when they cannot read? And you must give a written test. (FG2.9.8, 10-11, 18-23)

Parents' expectations also typically became obtrusive at the beginning of the Grade 1 year. Some parents were insistent that their children were already performing at

various levels and had gained mastery of skills in numeracy and literacy above and beyond those of the other beginning pupils. These parents were not always in agreement with teachers who started the year's work at, what they considered to be, too elementary a level. At times, such parents attempted to influence teachers in the "what," "when" and "to whom" of teaching-decisions.

However, teachers expressed a need to develop professional confidence and fortitude in their teaching. They had to consider several factors which inhibited much allowance for individualized instruction and assessment, such as a large class. One teacher had this to say on the matter:

> What I find then...that the parents who will say that their child knows this and that, when it comes down to the assessment and the nitty-gritty, the child knows very little. Sometimes after a while...when they see you really get...the lesson start getting more difficult; the level of difficulty...you have to increase it as you go up. They realize that it was really good to start from down there. But some of them feel that if you had started from where they say their children reach, the child would have been higher. But you have to just tell yourself that the children don't know anything as such, and start from scratch to cover everybody. You have a syllabus to follow, and with everything else that you have to do, you can't take one child in a cubicle and say, this is it...because you have to remember that you are dealing with over 50 children. (FG1.2.10-23)

Recommendations for Improved Assessment Practice

Teacher knowledge. During the interviews, the 20 Grade 1 teachers found the opportunity to reflect on their assessment practices quite beneficial. As a result, they all recommended that their principal or senior teachers include scheduled periods within each term when teachers of each grade would reflect on and discuss various areas of their assessment practices. Sessions of that kind, suggested 16 of the teachers, could be guided by tutors from the teachers' colleges, or arranged by either the Jamaica Teachers' Association or the National Assessment Programme (NAP) office. The teachers suggested further, that as the NAP was still in its early years of implementation, the time was opportune for requesting workshops and seminars on introducing and clarifying issues related to the National Assessment Programme; particularly relevant to the early primary grades, and specifically the Grade 1 Readiness Inventory. The teachers specified a need for information on the areas of alternate assessment strategies, interpretations of the GRI results, and subsequent follow-up activities for instructional purposes.

Teacher practice. Other recommendations were relevant to improving existing practices. Eight of the teachers sought information on best practices in assessing young children appropriately. They were particularly interested in making more systematic use of the many assessment strategies already employed in their Grade 1 classrooms.

Improved report cards. Ten of the teachers interviewed saw the need to modify their report cards to include a more comprehensive or detailed evaluation of each pupil's performance. The teachers said that such a report card would be more useful in informing parents and caregivers about their children's performance and progress in school as well as to indicate the areas in which their children needed help.

Summary

Eleven sets of interviews were conducted after the administration of the survey questionnaire. There were eight with individual teachers and three with focus groups of three, four, and five teachers, respectively. The findings were presented in six sections.

The 20 teachers who were interviewed taught in 11 schools, including seven primary, three all age, and one primary and junior high school. Nine of the schools had between 1,000 and 2,000 pupils, while the remaining two schools had 153 and 463 pupils, respectively. Class size ranged from 30 to 64 pupils. Only in the smallest school was there a multigrade class of Grade 1 and Grade 2 pupils. Large class size, noise, inflexible furniture, and limited movement and space were classroom characteristics which were highlighted by the teachers. Classrooms were arranged in a conventional way, with rows of pupils facing the chalkboard. Teachers taught from the front of the classroom, while the pupils remained at their places during instruction for most of each school day.

The ages of the teachers who were interviewed ranged between 36 and 40 years of age. While most of these teachers held a Diploma in Teaching, two held a Certificate in Teaching, two held a Bachelor in Education Degree, and one was pretrained. As most of the teachers had taught in other grades, they indicated that parents were more involved at the Grade 1 level than at other grades.

When asked to indicate their understanding of *assessment* and a distinction between assessment and testing, all of the teachers interviewed indicated that assessment was a necessary part of teaching. They identified testing as being the most dominant form

of assessment used in making decisions about pupil performance. Although all of the teachers understood assessment to be the means of finding out about their pupils' performance and rate of progress following instruction. Other teachers indicated that assessment was synonymous with testing and evaluation, that it involved a systematic way of interpreting pupil performance, or that it was finding out about pupil performance and progress by a variety of procedures.

The teachers indicated that assessment prior to the beginning of the school year took the form of school-designed entrance tests, the GRI, or both. Essentially, these tests were used to guide instructional planning, describe individual pupil's level of performance, confirm information gathered from other assessments, place pupils in different instructional groups, and identify levels of mastery in specific skills. The teachers also indicated the concerns that they had about the GRI. During the year, the teachers indicated that the assessment strategies most commonly used were testing, questioning, observations, and performance assessments. The teachers indicated that testing was used for instructional and lesson planning, sampling and tracking pupil performance and progress, grading, and reporting purposes. Questioning was used by the teachers for formative assessment during instruction to generate exchange of ideas and responses, assist pupils in their language development, provide immediate feedback, invite participation by all pupils, develop each lesson, and identify individual pupils who needed attention. The teachers indicated that observations were used to produce a holistic assessment of pupils throughout the school day, make spontaneous decisions in response to pupils' needs during instruction, and confirm findings from other forms of assessment. As indicated by the teachers, performance assessments were used to assess pupils who could neither read nor write.

For the teachers who were interviewed, *grading* meant the interpretation or representation of this information in the form of a summary numerical grade or letter grade. Brief statements were often provided as a verbal summary of the pupils' performances. For all the teachers, a written record of the information collected from the assessments during and at the end of each term was recorded in lessons books or lesson plan folders, mark books, and registers. The information resulting from assessments was used to make decisions about instruction and lesson planning, to decide on the selection

and placement of pupils, to inform and update teachers and school administrators on the pupils' performance and progress, to inform parents and caregivers on their children's performance and progress, and to prepare report cards and cumulative records.

The teachers indicated that the factors that influenced their assessment practices included personal and professional experience, the school curriculum, Grade 1 pupils' characteristics and learning needs, and the NAP. In order to improve their assessment practices, the teachers recommended scheduled times for reflection and articulation of the concerns and issues related to their assessment practices. They requested additional workshops and seminars on assessment issues and practices. They specified a need for information on the areas of alternate assessment strategies, interpretations of the GRI results, and subsequent follow-up activities for instructional purposes. The teachers also sought guidance in modifying their report cards to include a more comprehensive and detailed evaluation of each pupil's performance.

In the next chapter, a summary of the study is provided along with a discussion of the findings. Also presented are the limitations of the study, recommendations, and implications for future research and practice.

CHAPTER 6
SUMMARY, DISCUSSION OF FINDINGS, IMPLICATIONS
FOR PRACTICE AND RESEARCH

So I think that what we are doing now is fairly adequate to assess the
children...until we come to something else that works better. We have to use what
we have even though with all the writing that all the children have to do, it's not a
true reflection of what some are really able to do, of what they really know. (FG1.
24. 40-44)

I think presently there's a programme in place, ...where they're looking at a
variety of strategies to use as assessment... They're like using portfolios, projects,
dramatization and all that... But we don't know how to use them as yet... Based
on what the Ministry requires...they will have to help me grade these works. (IT4.
7. 14-21) (Grade 1 teachers)

In this chapter, there are three sections. The first is a summary of the study

including the purpose, the method of data collection and analysis, the findings, and the

limitations. This is followed by a discussion of the findings in light of the limitations and

will draw on related literature and research. Finally, recommendations are made along

with the implications for future research and practice.

Summary of the Study

The purpose of this study was to develop an understanding of how Jamaican

Grade 1 teachers, specifically those in the large urban area of Kingston and St. Andrew,

assess their pupils. This study lies against a backdrop of several topical issues which

currently have an impact on Grade 1 teachers and their assessment practices in Jamaica.

These issues surround the National Assessment Programme (NAP), the Grade 1

Readiness Inventory (GRI), and the "Classroom Testing and Measurement" compulsory

course completed by student-teachers in all Education programmes.

The NAP, under the aegis of the Ministry of Education and Culture, is a

programme that monitors students' academic performance as they progress from Grade 1

through Grade 6 (6-12 year-olds) (NAP, 1998). Through the NAP, tests are administered

in public and preparatory schools across Jamaica in Grades One, Three, Four, and Six.

The NAP also "trains teachers on-the-job, to prepare and use tests and other assessments,

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to keep better records, to report how well students are doing and to use the results and assessments" (NAP, 1998, p. 4).

The Grade 1 Readiness Inventory (GRI) "was designed to assess the cognitive skills of students who are beginning Grade 1, of the primary level" (NAP, 1999, p. 33). While the GRI covers four areas, including Visual Motor Coordination, Visual Perception, Auditory Perception, and Number and Letter Knowledge, the intent is to assist Grade 1 teachers in making instructional decisions to meet their pupils' performance levels more appropriately (NAP, 1999, p. 33). The GRI was first administered nationwide in 1997. During the period that this study was conducted (1998-1999), the GRI was administered for the second time (NAP, 1999, p. 36).

Most qualified teachers, except those who hold a Certificate in Teaching and have not completed the Upgrading Programme for the Diploma in Teaching (see Professional Qualification, Chapter 4), have completed a course in classroom assessment called "Classroom Testing and Measurement" (see Appendix B). The units of the course focus primarily on testing, and the types, construction, administration, and analysis of teacher-made classroom tests.

This study is based on the following premises: that teachers spend a large part of their day assessing, grading, and evaluating their students (Stiggins, 1991b; Schafer, 1991; Stiggins & Conklin, 1992; Stiggins, 1999); that teachers make use of a variety of assessment procedures to assess and arrive at decisions about their students' academic performance (Brewer, 2000; Stiggins & Conklin, 1992); and that while there are alternate forms of assessment available and used by teachers of young children, there is an overemphasis on testing (Paciorek & Munro, 1996; Stiggins, 1991a). The research questions were addressed:

1. What are the assessment strategies used by these teachers?
2. What decisions are made as a result of the information gained from assessments?
3. How do teachers make use of the GRI?
4. What understandings of assessment are held by Grade 1 teachers?
5. To what extent are the teachers' assessment practices influenced by the course "Classroom Testing and Measurement?

6. What are some of the factors that influence Grade 1 teachers' assessment practices?

Method

The complementary combination of quantitative and qualitative research methods was used for breadth of coverage of first grade teachers and in-depth, balanced understandings and outcomes (Goodwin & Goodwin, 1996; Miles & Huberman, 1994) of these teachers' assessment practices. A two-stage design was used whereby a survey questionnaire was administered during the first stage of data collection. This was followed in the second stage by interviews with teachers who had completed their questionnaires and expressed a willingness to continue their participation in the study.

Survey Questionnaire

Sample. During stage one, a purposeful cluster sample (Gall, Borg, & Gall, 1996) of 181 Grade 1 teachers from 61 of the 104 government-run schools in the parishes of Kingston and St. Andrew in Jamaica (Directory of Public Schools, Ministry of Education, Youth and Culture, 1997/1998) was selected. Eventually, 140 instruments were completed and collected from 47 schools. Consideration for the selection of schools to be included in the sample was given to geographic representation and accessibility.

Questionnaire development. The instrument (see Appendix F) was structured according to four sections. They included (a) demographic data, (b) information about Grade 1 teachers' classroom activities, (c) information about the teachers' understandings of assessment and the types and uses of the assessment strategies employed by these teachers, and (d) how the teachers made use of the information resulting from their assessments along with the teachers' views of factors that influenced their assessment practices. The items consisted of a range of closed, open-ended, and partially open-ended formats. During the initial stage of phase 1 of data collection, the questionnaire was piloted in two schools, and administered to eight Grade 1 teachers (5 and 3, respectively) for readability and manageability. The resulting corrections along with those from the review solicited from a measurement specialist were subsequently made.

Interviews

Participants. Following the administration of the survey questionnaire, a purposeful sample of 20 teachers was selected from among those who responded to the questionnaire and agreed to participate further in the study. For selection of the teachers, consideration was given to geographic representation, and accessibility of the teachers' schools, and the informative nature of teacher-responses on the questionnaire. There were eight individual, and three focus group interviews. The focus groups comprised groups of three, four, and five teachers, respectively.

Interview schedule. While the interview was semi-structured and informal, it sought to obtain additional information, clarification, and elaboration from the teachers, on their responses to the questionnaire and about their assessment practices.

Analysis

Survey questionnaire. For analysis of data from the survey questionnaire, data were entered into a computer directly from the instruments followed by 100% verification. Frequencies and proportions were computed for each question to obtain a description of the sample of respondents and a summary of their responses to the questions contained in the survey questionnaire. Content analysis was used to summarize open-ended responses.

Interviews. Each audio-taped interview was transcribed and a copy of the transcription was given to each teacher for confirmation and clarification. Data were subsequently categorized, and patterns and themes were identified and coded.

Trustworthiness of the data. To ensure trustworthiness of the data, a combined use of data collection devices, including the survey questionnaire, interviews, and field notes contributed to a process of triangulation to enhance the credibility and validity of the data and subsequent findings. Additionally, one research assistant, and a teacher educator in Jamaica, as well as a graduate student in the department of elementary education of the University of Alberta assisted in conducting an audit trail (Gall, Borg, & Gall, 1996) on the initial analysis of the interview data.

Findings

An analysis of the responses resulting from the questionnaire (see Chapter 4) and interviews (see Chapter 5) indicated findings in relation to the six research questions.

What Are the Assessment Strategies Used by These Teachers?

Results of this study indicate that while Grade 1 teachers used a variety of assessment procedures, those most prevalently used by these teachers were, in order, written tests, oral assessments (including questioning and discussion), and observations. The 20 teachers who were interviewed indicated that performance assessments were also prevalently used to assess first grade students.

Interestingly, while responses to the questionnaire indicated that written tests were the most commonly used assessment procedure (see Table 11), questioning was the "most frequently" used assessment strategy (see Table 11). Also, the reasons that teachers gave for using testing and questioning (see Table 12) indicated that they found the information from testing useful for instructional decisions primarily, while questioning allowed for pupil participation and immediate feedback, and the development of language and communication skills. The former was useful to the teacher, while the latter was for pupil-oriented purposes. In their interviews, the teachers spoke more about testing than they did about questioning, observations, and performance assessment.

What Decisions Are Made as a Result of the Information Gained From Assessments?

Analysis of the teachers' responses to both the questionnaire and interview indicates that teachers used the information resulting from the various assessment procedures to: make decisions about lesson planning, and instructions; provide information about pupil performance and progress; identify pupils for placement and selection; detect pupil characteristics and needs; inform teachers, school administrators and parents of pupil performance; and prepare reports and cumulative records. Their responses indicated that while all assessment procedures contributed to the uses above, each served specific purposes.

How Do Teachers Make Use of the Grade One Readiness Inventory (GRI)?

Nine in 10 teachers administered the GRI during either September or October, depending on when they received the testing materials. Generally, the teachers said they used the GRI to provide information about individual pupils as well as class performance, and to guide instructional planning. More specifically, the teachers who were interviewed said that the GRI helped to identify the pupils' levels of mastery in specific readiness

skills, to place pupils in different instructional groups, and in those schools where entrance assessments were administered, to confirm information gathered.

What Understandings of Assessment are Held by Grade 1 Teachers?

While analysis of the teachers' responses from the questionnaire and interview indicated definitions with distinct meanings, there were some teachers who, during the interviews, discussed "meaning" and "purpose" interchangeably. Generally, assessment was understood to be a "systematic method of collecting, ordering, and interpreting information about pupil performance" (see Chapter 4), a part of instructional decision-making, and synonymous with evaluation, or testing. Interview responses indicated assessment to be the means by which teachers could be informed about pupils' performance and their rate of progress following instructions, the achievement of objectives, and the strengths and weaknesses of a lesson or the teacher. Finally, several of the teachers who were interviewed said assessment was understood to be the use of various methods to assess pupil performance and progress. Collectively, the teachers' definitions were in agreement with that stated in the Principles for Fair Students Assessment Practices for Education in Canada (1993; see pp. 6-7).

To What Extent are the Teachers Influenced by the Course "Classroom Testing and Measurement" (CTM)?

The responses from both the questionnaire and interview indicate that most of the teachers completed the CTM course during their teacher-preparation programme. The teachers identified CTM as one of the factors that influenced their assessment practices, especially in the area of test design.

What Are the Factors that Influence Grade 1 Teachers' Assessment Practices?

The factors which most significantly influenced the assessment practices of the teachers included the primary school curriculum and lesson-planning, personal and professional experience, teacher preparation programme (including CTM), in-service workshops and seminars and pupils' learning and developmental needs. Other factors that the teachers identified as concerns but influenced their assessment practices were classroom characteristics (such as overcrowded conditions, class size, and availability of

instructional and support materials), and the traditional role of testing as a dominant means of assessing young children.

Limitations

The sample for this study was selected from the schools in Region 1 only. Region 1 was a boundary or school district, established by the Ministry of Education and Culture, and included the parishes of Kingston and St. Andrew (also known as the corporate area), a predominantly urban area. The selection of schools was Region 1 bound in order to facilitate manageability within the time-frame for conducting this study, and geographic accessibility. A survey questionnaire was administered to provide a description of Grade 1 teachers and their assessment practices. While in-depth information was sought through interviews, the teachers were essentially volunteer participants. The aim of purposeful sampling was to select Grade 1 teachers who were most likely to be "information-rich" with respect to the purposes of this study (Gall, Gall, & Borg, 1999).

Findings from this study may be context bound (e.g. grade, school, urban area, culture, and country). Therefore, transferability of findings may be limited to individuals who work in similar contexts. Also, this study may have had the effect of evaluation apprehension as several of the interview respondents were past student-teachers of mine. They may have expressed opinions and described practices in a favourable way, or provided the kind of responses they thought were expected. The response format for item 3b of the survey questionnaire (see Appendix F) did not allow for alignment of responses across the table of columns provided. Hence, 13 teacher-responses for the specific item were not used in the analysis of data.

Discussion of the Findings

Assessment Strategies Used by Grade 1 Teachers

Theories in child development and psychology and current trends and research in early childhood education and assessment indicate the value of many forms of assessment (Brewer, 2000; Cizek, 2000; Stiggins, 1991). All primary school teachers are expected to use various strategies to assess their pupils. In an attempt to assist these teachers, the NAP had begun in-service training of one teacher from each school as a school-based

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assessment coordinator. The responsibility of the coordinator was that of assisting "other teachers within the same school to improve their regular classroom tests and instruction by using a variety of methods to assess students' skills" (Ministry of Education & Culture, 1998, p. 5). However, the Grade 1 teachers said they were not equipped with the means to undertake such a variety of assessments. This was evident in one teacher's response, "No, I don't really know anything about alternative assessment. We don't get anything from the Ministry…they only send the booklet…they just send it like that" (FG3.17.10, 13-14). While findings from this study indicate that all Grade 1 teachers are already using and making decisions based on a variety of assessment procedures, the teachers view testing as the officially recognized assessment method, and all other methods as unofficial. The teachers say performance on written tests administered at the end of the term and year is important for decisions on promotion, retention, and prize-giving. The teachers argued that when performance and grades on these tests were not in keeping with their expectations (resulting from formative assessment done through alternate procedures), they made adjustments to the grades, or made a decision in favour of the whole term or year performance, or both. While the teachers attempted fairness in their assessment of individual pupils, there could be inconsistency in their assessment across pupils and Grade 1 classes in the school.

The teachers were not, as yet, convinced that results of alternate assessment strategies are viewed by school administrators, the Ministry, or parents and caregivers as being credible or consistent. If the NAP-trained assessment coordinator were able to assist these Grade 1 teachers, as was the intention of the NAP, then teachers would have some confidence in the credibility of alternate assessment procedures, and in using them overtly for summative decisions. At the same time, school administrators, parents and caregivers, and education officers would also need to receive the same in-service training so that they gained assurance about the use of the alternate strategies. What was apparent from the interviews was that not all Grade 1 teachers were aware of an overview of the NAP, and specifically, where they and their first grade pupils fitted in the national picture. As was apparent during this study, a few of the teachers who knew their school's assessment coordinator argued that assessment was more important at the Grade Six Achievement Test level (GSAT) and therefore received more attention.

Several of the teachers who used a variety of assessment procedures to assess their pupils justified such practices in view of their pupils' varied and emergent stages of development, differing abilities, and backgrounds. They felt that since they used a variety of teaching methods, there should be a carryover to their assessment practices, not unlike the precept of authentic assessment (Wiggins, 1989; Hills, 1993). Indeed, one of the teachers summarized the argument succinctly after reflecting on her own assessment practices, "Maybe you shouldn't teach them in one way and then you go and assess them in another way" (IT2.2.32-33).

While the teachers indicated that a variety of formative assessments were conducted at the individual and group level on a daily basis, and that the resulting information was useful for instructional planning and monitoring pupil performance and progress, the teachers felt impotent in effecting change to the summative significance attributed to end of year test results. The teachers' dilemma was between a tradition of test-orientation (Stiggins, 1991, p. 269) and developmentally appropriate assessment practices. Indeed, testing, perceived by these teachers as being the most dominantly used procedure for assessing Grade 1 pupils, is no different from that of their counterparts in many elementary schools of Canada and the USA (Stiggins, 1997; Wiggins, 1993; Rogers, 1991; Wilson, 1990).

These teachers have indicated that they continue to use tests to assess their pupils because they are systematic, convenient, formal, and produce grades. According to these teachers, the Ministry, school administrators, teachers and parents attribute more credibility to the results from testing than from other assessment method. As the teachers reflected on the factors that have influenced their assessment practices, they identified early school experiences as students in a test-oriented system, a teacher training programme that offered a single course on classroom assessment (CTM) with a focus on testing as the main method of assessment, and a teaching environment where administrative requirements stipulate tests for end of academic year decision-making. It is no wonder that testing is the dominant assessment procedure at the Grade 1 level. Teachers, school administrators, and parents "understand" the meaning of test scores and letter grades as interpretations of performance (Waltman & Frisbie, 1994). Teachers and school administrators need to be shown how to be systematic in using and recording

performance resulting from alternate assessment procedures and converting such performance as grades, which can then be understood by parents and caregivers.

Teachers gave many reasons for using tests to assess their pupils. They said testing was a requirement by the Ministry, monitored by the Education Officers, and executed by each school's administration. Testing was traditionally used and perpetuated because of convenience for, and familiarity to the teachers. Teachers were not aware of how to make optimal use of formative alternate assessment procedures for summative evaluations of pupil performance. Consequently, testing remained the "tried and true" end of year and summative form of assessment. Although all the teachers used a variety of assessment procedures, information about why, when and how each alternate assessment strategy was useful indicated that while the teachers were more articulate about their use of tests, they were less clear about the other more frequently used assessments, namely, questioning and discussion, observation, and performance. Faced with the dilemma of a preoccupation with tests or making more use of alternate assessments for end of year decisions, one teacher said, "paper and pencil tests are...not 100% appropriate for the Grade 1 level....For Grade 1...the answer, well, the answer is more time-consuming and too much trouble" (IT2.20.5-6, 21). What is clear is that teachers need to become more consistent and organized in what they do in the assessment of their pupils' performance because they rely on those procedures for very important decisions about these pupils.

Teachers said they used observation prevalently because it was convenient and appropriate in a crowded classroom situation. Teachers argued that observation "comes naturally" to them and is used throughout each class. While there were teachers who indicated that they made anecdotal records of their observations, by far most of the teachers relied on memory for storing information resulting from the use of observations to assess their pupils' performance. In view of this, it is important that these teachers be guided in developing skills that will allow for deliberate and systematic assessment and recording of performance through the use of observations, as an assessment procedure (Cizek, 2000). The means by which teachers will be guided to assess and record information about pupil performance can neither be time-consuming nor place additional demand on teachers. So quick "how-to" recipes have to be prepared and distributed.

Although all the teachers interviewed indicated they used performance assessments, only two of them argued for a systematic method of assessing and recording performance. One of these two teachers described her use of a combined method involving a checklist and rating scale for music. The former provided the various skills, in this case, knowing the words of a song, being able to sing the song, showing the rhythm by using any percussive instrument as an accompaniment. The teacher recorded mastery with a check beside each pupil's name. The latter method indicated mastery, near mastery and non-mastery alongside each task. Here, the teacher indicated the degree to which competency was achieved according to any of the three levels. This was a similar method of rating performance as that of the GRI. Other teachers who used this assessment procedure did not indicate using a systematic method of assessing and recording the performance of the pupils, either individually or as a group. They generally referred to making anecdotal entries, recording mastery or non-mastery (indicated by a tick or an "x") or grades in their record books.

The areas of establishing standards or criteria and ways of recording and interpreting results are valuable skills which should be included on the agenda of future workshops and seminars coordinated by the Ministry of Education, the National Assessment Programme office or the Jamaica Teachers' Association. A similar input should be made to the classroom testing and measurement course outline for teachers' colleges.

Preparation for Classroom Assessment

Although several of the teachers who were interviewed referred to their changing and evolving understanding of assessment to encompass the use of a variety of assessment strategies, the CTM course outline (see Appendix B) does not include a unit on alternate assessment strategies. Indeed, the course focuses on testing and does not meet the essential needs of teachers (especially those who specialize in early childhood education) in developing their assessment skills (Stiggins, 1999; Stiggins & Conklin, 1992; Stiggins, 1991; Schafer, 1991; Schafer & Lissitz, 1987). The teachers' exposure to using a variety of assessments, especially with young children who are unable to read and write in the early grades, is attributed to college tutors who supplement the classroom testing and measurement course. Unfortunately, such an example of a "hidden

curriculum" created inconsistency in two ways. First, only student-teachers who specialized in the Early Childhood Education (ECE) at the particular colleges that offered the ECE programme would have benefited from completing such studies. Student-teachers who specialized in the Primary Education programme, who would not have benefited from the supplementary unit or topic, were as likely as those in early childhood to teach either Grade 1 or 2 in primary schools. Both these grades overlapped as they were considered primary and early childhood by the Ministry of Education and Culture (Davies, 1999). Second, other student-teachers in teachers' colleges (and there were 10 altogether) across the island would not have had an exposure to using alternate assessments in CTM classes that adhere to the required course outline.

Assessment Prior to Grade 1

The teachers' recommendation of using oral over written forms of assessment was based on pupils' inability to read and write. Some of the children who entered Grade 1 were already along various stages of mastery in readiness skills. Most of them would have attended Basic schools, Infant schools or departments for one or two years and would have been exposed to a preprimary curriculum focused on and providing for the development of readiness skills. There were other children who entered Grade 1 without a preprimary experience. Written forms of assessment were found to be selective in providing a representative sample of pupil performance of only those who could write. Teachers relied on oral forms of assessment in order to sample the performance of all pupils across diversities. One teacher described the diverse backgrounds of her pupils at the beginning of each academic year:

> Oh, the children come with so many different abilities...and there are at least eight or nine basic schools that feed this school, and with each of them there is a vast difference. Even with those coming from basic schools, the children might be good at numbers, but when it comes to phonics, no...no. And some are good at phonics but not at numbers and not at listening. And there are some who will come and the motor skills not developed any at all. You have to teach them how to hold the crayon, and things like that. So when you get them at Grade 1, in the beginning then, we have more different levels than other classes. the Grade 1 teacher has to deal with the readiness skills. She has to start a programme for those who are ready for reading and writing, those who are in between, and those not ready at all. (IT1.6.37-46)

Although only two of the teachers who were interviewed indicated that they prepared and used their own entrance exercises, generally, the teachers expressed a need for a diagnostic instrument which would be helpful in identifying the performance levels of their pupils in preparation for the Grade 1 programme and curriculum. The GRI was useful in this regard, and the teachers affirmed and appreciated its availability.

The teachers who designed and administered their own readiness test or entrance exercise in addition to the GRI did not find the undertaking redundant. Indeed, the teachers at these two schools used the GRI to confirm results of their own exercise, and to identify specific areas which may have been overlooked by the first test. Although most of the teachers administered the GRI, there was inconsistency in its administration. The factors to be considered by the NAP include class size, invigilation, and the extent to which administration procedures are to be adhered to. A requirement should be that teachers administering the Inventory for the first time, should be given an orientation on the purpose, administration, scoring, and use of the GRI. As noted by two teachers who were using the GRI for the first time, in response to their pupils experiencing difficulties in completing the test, the GRI booklet was used as a workbook, and items rehearsed for repeat sittings. Neither of the two teachers had been given any guidance in the aims, administration, and uses of the GRI. Also, 11 teachers (see Table 15) indicated on the questionnaire that the GRI was administered more than once. One of these teachers, who was interviewed, said that the first administration of the GRI was to indicate each child's level of performance in each readiness skill in September. When the GRI was administered again, usually by the end of the first term, it was to indicate the progress each child had made in each readiness skill. Another of the interviewed teachers indicated that "repeated use" of the GRI was in the form of using the GRI test booklet for practice exercises until each pupil had "mastered each question." Seemingly, the Grade 1 teachers' perceptions of the GRI and its uses were inconsistent.

During the administration of the GRI, difficulties including insufficient space, inadequate supervision and inconsistent instructions pointed to questionable results. The significance of these activities should not go unnoticed by the NAP coordinators.

What both the GRI and teacher-designed entrance exercises confirmed was the disparity and differences of the pupils in each Grade 1 class. The aim of the National Assessment Programme was to

> tell students, teachers and parents how well a student is performing for his/her age and grade level. The teacher and principal can use these results to identify the areas in which the student is doing well, and the areas in which s/he needs more assistance. They can then work with parents to correct any weakness that students may have. (Ministry of Education, Youth and Culture, 1998, p. v)

While the teachers said that they experienced difficulties in administering and interpreting the results of the GRI, the teachers were able to identify their pupils' mastery, near mastery, or non-mastery of the readiness skills represented on the GRI. The teachers indicated (see Chapter 4, p. 71 and Chapter 5, p. 94) that they had already made use of the GRI results in lesson and instructional planning. However, the teachers saw the potential for making greater use of these results, and had requested more informed guidance in identifying specific pupil difficulties and recommending appropriate instructional activities for intervention. Indeed, referring to the GRI, the National Assessment Programme office had this to say:

> The Grade 1 Readiness Inventory helps teachers to identify students who do not have basic skills for Grade One. Many of the students identified from studies we have done don't really need a massive amount of intervention to do well in school, but if they don't get that intervention they are not going to perform. (Ministry of Education, Youth and Culture, 1998, p. 1)

According to research conducted on the National Assessment Programme (Miller, 1992), "On average, about 30 percent of the children enter Grade 1 without mastering each sub-test" (p. 173). Teachers have responded to the results of their pupils' performance on the GRI, and, supported by Miller (1992), the "wake-up call" was timely for providing Grade 1 teachers with corrective or intervention strategies to meet pupils' "near or non-mastery" performance.

While the NAP facilitated the training of a School Based Assessment (SBA) coordinator for each school, the effectiveness of such a programme was at that time dependent on the responsibility of the coordinator and how he or she disseminated assessment-related information and provided the necessary training to appropriate teachers throughout the school. From indications of this study, information about the

GRI, how to interpret the results, and instructional decisions to meet pupils requirements was being sought by the teachers who were teaching Grade 1. In-school training and workshops for teachers, by SBA coordinators, needed to be up to date, consistent and sustained in order that all teachers be informed about each NAP test. This should facilitate staff turnover and teachers who would teach across grades.

It was evident in this study that the majority of Grade 1 teachers found the GRI useful as an indicator of pupils' mastery, near or non-mastery of readiness skills. With this information, the teachers were able to group their children and make instructional decisions and plans to provide more appropriately for their pupils' developmental and performance levels. Indeed, the teachers found the GRI convenient as a "ready-made" and packaged diagnostic instrument. For these reasons, the GRI is commendable and should remain available for teachers to administer at the beginning of the academic year.

However, several of the teachers expressed dissatisfaction with the Inventory, specifically because they were required to administer, score and return the GRI test scripts to the Ministry expeditiously, and did not have enough time to make adequate use of the test results. Other teachers questioned the credibility of the results due to unsatisfactory conditions of administration. Finally, the teachers indicated that their pupils experienced problems in following test instructions.

Reporting

Teachers expressed their concern about an overemphasis placed on test scores and grades from written assessments, while their anecdotal records were de-emphasized for decision-making and reporting. Indeed, the teachers argued that test scores and grades were inadequate in communicating about their pupils' performance. This was supported by Cizek (2000) who referred to grades as "primitive tools for accomplishing the diverse communication tasks demanded of them" (p. 18). Although in some schools, the teachers modified their report cards to include anecdotal remarks, some reports provided codes which remained as nondescript categories and were unsatisfactory. Teachers, assisted by the NAP office and the teachers' colleges, can explore more innovative ways of describing pupil performance and improving communication about pupils' academic performance and progress.

Recommendations to the Ministry of Education and Culture

Although the findings of this study are limited to the assessment practices of Grade 1 teachers, and specifically those from more urban locations in Jamaica, there are implications that could influence the assessment of young children nationally. In recent time, public attention has been focused on assessment-related issues stemming from the NAP, and more specifically, at the Grade Six Achievement Test (GSAT) level. Indeed, the Minister of Education and Culture has announced that a "Standardized system will measure the performance of the island's schools" ("Grade 4 students fail again," 2000). The column in which the Minister made the statement was published amidst the positive attempts of the NAP. There are four implications of the findings of this study to the current assessment discourse in Jamaica.

1. According to Bergan and Feld (1993):

> Standardized tests fail to reflect adequately what children learn through instruction (National Commission on Testing and Public Policy, 1990). Children know so much more than they are "taught," and what is tested may not be the important learning that the children have done. Early childhood teachers, administrators, researchers, and policymakers, therefore, have reasserted the position that assessment and curriculum should be united in the service of learning. (p. 41)

In an attempt to avoid a "failure-hysteria" trickle-down effect to the GRI component of the NAP, and in support of a broader trend being advocated by proponents of Developmentally Appropriate Practices with young children (McAfee & Leong, 1997; Shepard, 1994; NAEYC & NAECS/SDE, 1991; Meisels, 1987), I recommend that (a) the GRI be used primarily to identify the performance of individual pupils for purposes of providing appropriate instructional opportunities for each pupil, (b) the GRI results remain within the primary schools for the use of teachers, parents and care-givers, and school personnel, (c) School-Based Assessment coordinators be adequately trained in the administration procedures, scoring, and interpretation of results of the GRI, (d) Grade 1 teachers who might be administering the GRI for the first time be provided with in-service training by the NAP; and (e) schools receive assistance in administering the GRI under more ideal conditions.

2. The findings of this study indicate that Grade 1 teachers share the perception that testing is a requirement by the Ministry (education officers) and the school

administration. They felt that testing was considered to be the dominant assessment procedure to be used for important decisions concerning Grade 1 pupils. Such perceptions are reinforced by the required course in classroom testing and measurement (see Appendix B) for all teacher training programmes. In view of these findings, and in support of current studies on assessment, and those who advocate the benefits of various assessment strategies (Brewer, 2001; Wortham, 2001; Eliason & Jenkins, 1999; Stiggins, 1997; Genishi, 1995; Bergan & Feld, 1993; Nickerson, 1989), I recommend that the inservice training of education officers (especially those responsible for early childhood education in the early childhood unit) in the area of alternate assessments be a priority. Through the education officers, and master teachers a response to the teachers' requests for training and guidance in more systematic applications of various assessment procedures could be realized.

3. Findings from this study indicate that one of the factors that influenced the teachers' assessment practices was the CTM course. The Joint Board of Teacher Education (JBTE) is responsible for revising the various programmes for teacher preparation. In its next revision of courses, I recommend that Classroom Testing and Measurement be prioritized for inclusion in the course revision and that alternate assessment procedures be adequately represented. I also recommend that the Ministry collaborates with the JBTE and the teachers' colleges so that a consistent programme in assessment be available for teachers already in the classroom (through in-service workshops and seminars) and teacher-trainees.

4. The findings of this study indicate that Grade 1 teachers have concerns about the conditions of their classrooms where teaching and learning were anticipated. The teachers indicated that their classes were overcrowded, there was limited space, and the furniture was bulky, difficult to move, and inappropriate for young children. Brewer (2001) summarized the effects of the physical conditions of the classroom on the performance of children in the following way:

> Room arrangement is one way of communicating to children how they are expected to behave in the classroom. An open, stimulating arrangement invites children to participate and explore. A ... restricted environment says that the most important considerations in the classroom are obedience and order. (p. 78)

The teachers indicated that the existing conditions were conducive to instances of their pupils copying during tests. Citing inadequate space as a problem when assessing her pupils, one teacher said:

> And then, because of limited space, you find that you give them written assessment, they will copy. Because they so "chuck up," they copy. They copy from each other. So you don't get the correct...you don't get the true picture of what the child really knows. (FG2.3.35-38)

Such conditions where the classrooms were typically small for the number of pupils taught in them and where the inadequacy of space allowed for limited classroom movement of both pupils and teachers reduced the validity of assessment scores.

Given these conditions, it is clear that the Ministry of Education and Culture needs to address this issue by increasing the capital support for new classrooms and furniture. Given an increased number of classes, class size will be reduced. Also, by having easily moveable furniture of appropriate size for the children, rearrangement can occur in order to meet changing classroom needs. Teachers will then be able to move around the classroom to monitor their pupils as they participate in activities, form cooperative groups, interact with individual and groups of pupils, and allow for more individualized instruction, and reduce copying by pupils when they are being tested.

Implications for Future Research

1. The findings of this study provide insights on the assessment practices of Grade 1 teachers. The perceptions held by these teachers and the descriptions of their practices were limited to responses that resulted from a survey questionnaire and interviews. Further study of these teachers' assessment practices, through case studies demanding prolonged engagement and persistent observation (Creswell, 1998) could result in more in-depth understanding of how Grade 1 teachers assess their pupils. The researcher's role of being an observer could allow for the acquisition of greater details about the characteristics and nuances of these teachers' assessment practices. Such details might have been overlooked by the teachers themselves as they responded to the survey questionnaire and interviews utilized by this study. Through the case study approach, such details of the teachers' assessment practices could be observed, described, examined and analyzed by both the teacher (as co-researcher) and researcher.

2. As this study was concentrated in Kingston and St. Andrew, comprising more urban contexts, a similar study of the Grade 1 teachers' assessment practices across the Island would inform teachers, school administrators, Ministry officials and the coordinators of the National Assessment Programme of patterns, concerns, similarities and differences of the assessment of Grade 1 pupils in rural areas. The influence of differences due to geographic, economic, and rural characteristics could be realized. As a result of this research, there could be implications for the administration and uses made of the GRI which might be context-specific, and the provisions to be made available for consistent assessment of Grade 1 pupils in rural areas nationally.

3. Findings of this study about the Grade 1 teachers' assessment practices allow for a better understanding of how teachers designed and used tests. The findings indicate that the Grade 1 teachers made use of the information gained from tests mostly for summative evaluations. Their administration of tests varied across terms in order to accommodate the pupils' reading and writing skills. As well, the findings indicate these teachers' concerns about testing, which included instances of copying, test anxiety, and inaccuracies in the resulting information about pupil performance. A comparative study of testing designed, administered and used for formative and summative purposes could reveal differences in these teachers' testing practices. Results could influence recommendations for more appropriate testing and assessment practices to be used with young children. This could respond to the majority of Grade 1 teachers, who, through this study, requested assistance in their developing improved testing and assessment skills.

4. The findings of this study indicate several factors that inhibit accurate assessment of pupils in Grade 1. They include overcrowded conditions, limited classroom space, bulky and inappropriate furniture, and inadequate materials. A case study of teachers whose assessment practices under these adverse conditions are recognized for being efficient could be conducted. The aim would be to identify those assessment practices more conducive to and appropriate for contexts similar to those in Jamaica.

It is possible to conduct case studies on several teachers' assessment practices. These could be restricted to Grade 1 teachers only or apply to teachers in other grades. In the former case, the common characteristics and nuances, benefits and concerns would be

highlighted. In the latter case, significant differences in assessment practices across grades would be apparent.

As this study was concentrated in Kingston and St. Andrew, comprising more urban contexts, a study of the Grade 1 teachers' assessment practices across the Island would inform teachers, school administrators, Ministry officials and the coordinators of the National Assessment Programme of patterns, concerns, similarities and differences of the assessment of Grade 1 pupils in the country. As a result of this research, there would be implications for future study in the administration and uses made of the GRI.

Implications for Practice

Professional Development

As a result of the findings of this study, in-service workshops and seminars on assessment are recommended. These could offer monitored or mentored occasions for teachers to talk about and reflect on different aspects of their assessment practices. Mentors may include outstanding teachers (master teachers already identified by the Ministry of Education and the Jamaica Teachers Association), teachers' college personnel, or Education faculty members of a university. Inservice opportunities could be arranged by the schools' administrators or education officers. For cooperating teaching practice schools, the affiliated teachers' college could participate in organizing the initiative.

Also, conferences, workshops, and seminars could be used to better sensitize teachers to test anxieties and to equip them with ways of helping their students to develop coping strategies. These workshops and seminars could be initiated by the Jamaica Teachers' Association, the National Assessment Programme office, and the Ministry of Education and Culture.

Inservice workshops and seminars are also recommended for assisting teachers in creative ways of designing simple test items in different formats for end of year tests appropriate for Grade 1, creating systematic procedures for recording assessments of pupil performance through alternate assessment strategies, and developing grading and reporting methods more appropriate for communicating descriptions of pupil performance and progress more effectively. There could also be scheduled ongoing workshops and seminars for teachers, new to the profession or specific grade, on each test

of the NAP. For Grade 1 teachers, the purposes, description, administration, and marking of the GRI should be especially covered. Finally, in-service workshops and seminars could be provided for teacher-educators on the National Assessment Programme, and the supportive role of teachers' colleges, through their various programmes, in developing awareness and necessary skills of student-teachers in conducting national assessment.

Teacher Preparation Programme

As a result of the findings of this study, a recommendation is also made for a revision of the compulsory course in classroom testing and measurement. Based on my findings, a unit on alternate assessment strategies needs to be included. Also recommended is a revision of the two core courses in the Early Childhood Education programme, namely Teaching in Early Childhood Education (TECE) and Strategies in Early Childhood Education (SECE) to include assessment of young children in the former course, and various procedures which may be used to appropriately assess young children in the latter course.

Having completed this study to this stage, knowing that these interpretations are limited to and influenced by my own experiences of teaching as a Grade 1 teacher and a teacher educator, and an ever-emergent meaning-making journey as a doctoral student, it is my hope that the sentiments of one of the teachers who participated in this study are realized:

> I just hope you do well, and the little information I give will shed some light of what we as teachers do and go through. I hope that you will be able to pass on something to the teachers coming out into the system. Help them to know that teaching is more than the job. Teaching is more than a group of children or a class. Teaching is influencing individuals' lives. You never know if what you say and what you do...who it will reach. When you get back to Teachers' College, see that testing, assessment and evaluation are fully understood for practice and for our children's sake. You understand me? (IT7.21.23-24, 26-28, 30, 36-37)

REFERENCES

Airasian, P. W. (1991). *Classroom assessment.* New York: McGraw-Hill.

Arter, J. (1999). Teaching about performance assessment. *Educational Measurement: Issues and Practice, 18*(2), 30-44.

Bateson, D. J. (1990). Measurement and evaluation practices of British Columbia science teachers. *Alberta Journal of Educational Research, 36,* 45-51.

Berg, B. L. (1998). *Qualitative research methods for the social sciences.* Toronto: Allyn and Bacon.

Berg, B. L. (2001). *Qualitative research methods for the social sciences* (4th ed.). Toronto: Allyn and Bacon.

Bergan, J. R., & Feld, J. K. (1993). Developmental assessment: New directions. *Young Children, 48*(5), 41-47.

Bergman, A. B. (1993). Performance assessment for early childhood. *Science and Children, 30*(5). 20-22.

Birenbaum, M. (1996). Assessment 2000: Towards a pluralistic approach to assessment. In M. Birenbaum & F. J. R. C. Dochy (Eds.), *Alternatives in assessment of achievements, learning processes and prior knowledge.* Norwell, MA: Kluwer Academic.

Blenkin, G. M. (1992). Progression, observation and assessment in early education: The context. *Assessment in Early Childhood Education.* London: Paul Chapman.

Blenkin, G. M., & Kelly, A. V. (Eds.). (1992). *Assessment in early childhood education.* London: Paul Chapman.

Bogdan, R., & Biklen, S. (1992). *Qualitative research for education: An introduction to theory and methods* (2nd ed.). Boston: Allyn & Bacon.

Bradburn, N. M., Sudman, S., & Associates. (1979). *Improving interview method and questionnaire design.* San Francisco: Jossey-Bass.

Brewer, J. A. (1992). *Introduction to early childhood education: Preschool through primary grades.* Needham Heights, MA: Allyn & Bacon.

Brewer, J. A. (1998). *Introduction to early childhood education: Preschool through primary grades* (3rd ed.). Needham Heights, MA: Allyn & Bacon.

Brewer, J. A. (2001). *Introduction to early childhood education: Preschool through primary grades* (4th ed.). Needham Heights, MA: Allyn & Bacon.

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Chuck, D. (1998, February 18). NAP has more significance. *The Jamaica Gleaner* [On-line]. Available: http://www.go-jamaica.com/gleaner/19980218/ cleisure/c5.html

Cizek, G. J. (2000). Pockets of resistance in the assessment revolution. *Educational Measurement: Issues and Practice, 19*(2), 16-23, 33.

Clark, A. (1997). A social world's research adventure: The case of reproductive science. In A. Strauss & J. M. Corbin (Eds.), *Grounded theory in practice*. Thousand Oaks, CA: Sage.

Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design and analysis issues for field settings*. Chicago: Rand McNally.

Creswell, J. W. (1994). *Research design: Qualitative & quantitative approaches*. Thousand Oaks, CA: Sage.

Davies, R. (1999). The integrated curriculum in the lower primary school in Jamaica: Theory versus practice. In R. King (Ed.), *Institutes of education annual, school and college: Educational issues and trends in the Commonwealth Caribbean* (pp. 21-36). Mona, Kingston, Jamaica: The University of the West Indies, Institute of Education.

Directory of Public Schools. (1997/1998). Ministry of Education, Youth, and Culture, Kingston, Jamaica.

Eliason, C., & Jenkins, L. (1999). *A practical guide to early childhood curriculum* (6th ed.). Upper Saddle River, NJ: Prentice-Hall.

Fang, Z. (1996). A review of research on teacher beliefs and practices. *Educational Research, 38*(1), 47-65.

Faulkner, D. M., & Porter, B. (1995). Assessment in the primary grades of the Jamaican educational system: The role of the National Assessment Programme. *Torch, 32,* 7-13.

Faulkner, D. M., & Porter, B. (1997). Assessment in the primary grades of the Jamaican educational system: The role of the National Assessment Programme 1993-1997. Unpublished manuscript of revised article published in the *Torch, 32*.

Gall, J. P., Gall, M. D., & Borg, W. R. (1999). *Applying educational research: A practical guide* (4th ed.). White Plains, NY: Longman.

Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research: An introduction* (6th ed.). White Plains, New York: Longman.

Genishi, C. (1995). *Assessment in the early childhood classroom: The scholastic early childhood workshop*. New York: Scholastic.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research.* Chicago: Aldine.

Gleaner Company. (1995). *The Gleaner geography and history of Jamaica.* Kingston, Jamaica: Author.

Glesne, C., & Peshkin, A. (1992). *Becoming qualitative researchers: An introduction.* White Plains, NY: Longman.

Goodwin, W. L., & Goodwin, L. D. (1996). *Understanding quantitative and qualitative research in early childhood education.* New York: Teachers College Press.

Grade 4 students fail again: Poor showing in literacy test. School evaluation next year. (2000, July 11). *Daily Observer,* p.1.

Grant, D. R. B. (1982). *Training teacher trainers and para-professional teachers.* Jamaica: Jamaica Publishing House.

Grant, M. (1993). How to develop an assessment program. In J. Hendrick, S. Schwartz, & C. Seefeldt (Eds.), *Early childhood curriculum resource handbook: A practical guide for teaching early childhood (pre-k-3)* (pp. 109-127). Millwood, NY: Kraus International.

Gullo, D. F. (1994). *Understanding assessment and evaluation in early childhood education.* New York: Teachers College Press.

Haney, W., & Madaus, G. (1989). Searching for alternatives to standardized tests: Whys, whats, and whithers. *Phi Delta Kappan, 70*(9), 683-687.

Hills, T. W. (1993). Assessment in context: Teachers and children at work. *Young Children, 48*(5), 20-28.

Hyman, H. (1960). *Survey design and analysis: Principles, cases and procedures.* Glencoe, IL: The Free Press.

Irwin, D. M., & Bushnell, M. M. (1980). *Observational strategies for child study.* New York: Holt, Rinehart, and Winston.

Joint Board of Teacher Education. (1993). *Education syllabus: Programme of studies for the three year diploma in teaching.* Kingston, Jamaica: University of the West Indies, Faculty of Education.

Kamii, C. (Ed.). (1990). *Achievement testing in the early grades: The games grown-ups play.* Washington, DC: National Association for the Education of Young Children.

Kelly, V. (1992). Concepts of assessment: An overview. In G. M. Blenkin & A. V. Kelly (Eds.), *Assessment in early childhood education* (pp. 1-23). London: Paul Chapman.

Krathwohl, D. R. (1998). *Methods of educational & social science research: An integrated approach*. Reading, MA: Addison-Wesley Educational.

Krechevsky, M. (1991). An innovative assessment alternative. *Educational Leadership, 48*(5), 43-48.

Langenbach, M., Vaughn, C., & Aagaard, L. (1994). *An introduction to educational research*. Needham Heights, MA: Allyn & Bacon.

Langhorst, B. H. (1989). *Assessment in early childhood education: A consumer's guide*. Portland, OR: Northwest Regional Educational Laboratory Test Center.

Lee, F. Y. (1992). Alternative Assessments. *Childhood Education*, Winter, 72-73.

Lidz, C. S. (1981). *Improving assessment of schoolchildren*. San Francisco, CA: Jossey-Bass.

McAfee, O., & Leong, D. J. (1997). *Assessing and guiding young children's development and learning* (2nd ed.). Needham Heights, MA: Allyn and Bacon.

McLean, M., Bailey, D. B., Jr., & Wolery, M. (1996). *Assessing infants and preschoolers with special needs*. Englewood Cliffs, NJ: Prentice-Hall.

McMillan, J. H., & Schumacher, S. (1993). *Research in education: A conceptual introduction* (3rd ed.). New York: Harper Collins.

Meisels, S. J. (1989). High-stakes testing in kindergarten. *Educational Leadership, 46*(7), 16-22.

Mescher, J. R. (1997). Elementary teachers who use alternative assessment strategies: Multiple case studies of their professional development. AAC 9639308. Proquest - Dissertation abstracts.

Miles, M. B., & Huberman, A. M. (1994). *An expanded sourcebook: Qualitative data analysis*. Thousand Oaks, CA: Sage.

Miller, E. (1992). *Promising projects in primary education: Education for all: Caribbean perspectives and imperatives*. Washington, DC: The Johns Hopkins University Press, Inter-American Development Bank.

Miller, E. (1994). Caribbean primary education: An assessment. *Caribbean Journal of Education, 16*(3), 136-171.

Miller, E. (1995). New directions in teacher education in Jamaica: The 1981 reforms. *Caribbean Journal of Education, 17*(1), 25-55.

Ministry of Education and Culture. (1998). *The national assessment programme: Your questions answered.* Kingston, Jamaica: National Assessment Programme.

Ministry of Education and Culture. (1999). *The national assessment programme: It's all about learning.* Kingston, Jamaica: Jamaica Information Service (JIS) and the Jamaica Observer.

Ministry of Education and Culture. (1999). *The national assessment programme: Final report 1993-1999.* Kingston, Jamaica: National Assessment Programme.

Ministry of Education, Youth, and Culture. (1995). *The Education Act: The education regulation, 1980: Arrangement of regulations.* Kingston, Jamaica: Author.

Ministry of Education, Youth, and Culture. (1996a). *National assessment programme report on Grade 1 readiness inventory.* Kingston, Jamaica: Author.

Ministry of Education, Youth, and Culture. (1996b). *Manual for implementing the School-Based Assessment Programme.* Kingston, Jamaica: National Assessment Programme.

Ministry of Education, Youth, and Culture. (1996c). *Readiness inventory handbook.* Kingston, Jamaica: Core Curriculum Unit.

Ministry of Education, Youth, and Culture. (1996d). *Grade One Readiness Inventory (GRI): Preliminary results on the 1994 administration.* Kingston, Jamaica: National Assessment Programme.

National Assessment Programme: Your Questions Answered. (1998). National Assessment Programme, Ministry of Education, Youth and Culture, Kingston, Jamaica. Unpublished draft document.

National Association for the Education of Young Children (NAEYC). (1988). Position statement on standardized testing of young children 3 through 8 years of age. *Young Children, 43*(3), 42-47.

National Association for the Education of Young Children & the National Association of Early Childhood Specialists in State Departments of Education (NAEYC & NAECS/SDE). (1991). Guidelines for appropriate curriculum content and assessment in programs serving children ages 3 through 8. *Young Children, 46*(3), 21-38.

Nava, F. E., Josefa, G., & Loyd, B. H. (1992, April). *An investigation of achievement and non-achievement criteria in elementary and secondary school grading.* Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA. (ERIC Document Reproductoin Service No. ED 346 145)

Nickerson, R. S. (1989). New directions in educational assessment. *Educational Researcher, 18*(9), 3-7.

Paciorek, K. M., & Munro, J. H. (1996). (Eds.). *Annual editions: Early childhood education. 1996/1997.* Guilford, CT: Dushkin.

Patton, M. Q. (1990). *Qualitative evaluatoin and research methods* (2nd ed.). Thousand Oaks, CA: Sage.

Perrone, V. (Ed.). (1991). *Expanding student assessment.* Alexandria, VA: Association for Supervision and Curriculum Development.

Popham, W. J. (1999). *Classroom assessment: What teachers need to know* (2nd ed.). Needham Heights, MA: Allyn & Bacon.

Principles for Fair Student Assessment Practices for Education in Canada. (1993). Edmonton, AB: University of Alberta, Centre for Research in Applied Measurement and Evaluation, Joint Advisory Committee.

Rogers, W. T. (1991). Educational assessment in Canada: Evolution or extinction? *Alberta Journal of Educational Research, 37*(2), 179-192.

Rogers, W. T., Maguire, T. O., & Leighton, J. P. (1997). *Alternative methods for assessing performance in mathematics.* Paper presented at the annual conference of the Canadian Society for the Study of Education (CSSE), St. John's, NF.

Scates, D. E. (1943). Differences between measurement criteria of pure scientists and of classroom teachers. *Journal of Educational Research, 37,* 1-13.

Schafer, W. D. (1991). Essential assessment skills in professional education of teachers. *Educational Measurement: Issues and Practice, 10*(1), 3-6, 12.

Schafer, W. D., & Lissitz, R. W. (1987). Measurement training for school personnel: Recommendations and reality. *Journal of Teacher Education, 38*(3), 57-63.

Seidman, I. E. (1991). *Interview as qualitative research.* New York: Teachers College Press.

Shepard, L. A. (1989). Why we need better assessments. *Educational Leadership, 46,* 4-9.

Shepard, L. A. (1994). The challenges of assessing young children appropriately. *Phi Delta Kappan, 76*(3), 206-212.

Sieber, S. D. (1973). The integration of fieldwork and survey methods. *American Journal of Sociology, 78*(6), 1335-1359.

Smith, J. K. (1983). Quantitative versus qualitative research: An attempt to clarify the issue. *Educational Researcher, 12*(3), 6-13.

Smith, J. K., & Heshusius, L. (1986). Closing down the conversation: The end of the quantitative-qualitative debate among educational inquirers. *Educational Researcher, 15*(1), 4-12.

Smith, M. L., & Glass, G. V. (1987). *Research and evaluation in education and the social sciences.* Englewood Cliffs, NJ: Prentice-Hall.

Spodek, B. (1988). Implicit theories of early childhood teachers: Foundations for professional behavior. In B. Spodek, O. N. Saracho, & D. L. Peters (Eds.), *Professionalism and the early childhood practitioner* (pp. 161-172). New York: Teachers College Press.

Spodek, B., & Saracho, O. N. (Ed.). (1997). Issues in early childhood assessment and evaluation. *Yearbook in early childhood education: Issues in early childhood educational assessment and evaluation.* New York: Teachers College Press.

Statistical Unit. (1996/97). Title. Kingston, Jamaica: Ministry of Education, Youth, and Culture.

Stiggins, R. J. (1991a). Facing the challenges of a new era of educational assessment. *Applied Measurement in Education, 4*(4), 263-273).

Stiggins, R. J. (1991b). Relevant classroom assessment training for teachers. *EducationalMeasurement: Issues and Practice, 10*(1), 7-12.

Stiggins, R. J. (1997). *Student-centered classroom assessment* (2nd ed.). Columbus, OH: Merrill.

Stiggins, R. J. (1999). Evaluating classroom assessment training in teacher education programs. *Educational Measurement: Issues and Practice, 18*(1), 23-27.

Stiggins, R. J., & Bridgeford, N. J. (1986). Title. R. A. Berk (Ed.). *Performance assessment* (pp. 469-492). Baltimore, MD: John Hopkins University Press.

Stiggins, R. J., & Conklin, N. (1992). *In teachers' hands: Investigating the practice of classroom assessment.* Albany, NY: SUNY Press.

Strauss, A. L. (1987). *Qualitative analysis for social scientists.* New York: Cambridge University Press.

Teacher Certification Regulations of the Joint Board of Teacher Education. (1993). Kingston, Jamaica: University of the West Indies (Mona), Faculty of Education, Joint Board of Teacher Education.

Terwilliger, J. S. (1971). *Assigning grades to students.* Glenview, IL: Scott, Foresman.

Waltman, K. K., & Frisbie, D. A. (1994). Parents' understanding of their children's report card grades. *Applied Measurement in Education, 7*(3), 223-240.

Ward, A. W., & Murray-Ward, M. (1999). *Assessment in the classroom.* Belmont, CA: Wadsworth.

Whyte, M. A. (1983). *Caribbean education series: A short history of education in Jamaica.* London: Hodder and Stoughton.

Wiggins, G. P. (1989). A true test: Toward more authentic and equitable assessment. *Phi Delta Kappan, 70*(9), 703-713.

Wiggins, G. P. (1990). A conversation with Grant Wiggins. *Instructor, 100*(1), 51.

Wiggins, G. P. (1993). *Assessing student performance: Exploring the purpose and limits of testing.* San Francisco, CA: Jossey-Bass.

Wilson, R. J. (1990). Classroom processes in evaluating student achievement. *Alberta Journal of Educational Research, 36,* 4-17.

Wint, C. (1998). NAP: A good replacement for CEE? *The Jamaica Gleaner* [On-line]. Available: http://206.239.8.211/gleaner/19980203/cleisure/c4.html

Wolf, D. P. (1988). Opening up assessment. *Educational Leadership, 45,* 24-29.

Wolf, D. P. (1989). Portfolio assessment: Sampling student work. *Educational Leadership, 46,* 35-39.

World Bank. (1993). *A World Bank country study: Caribbean region access, quality, and efficiency in education.* Washington, DC: The International Bank for Reconstruction and Development/The World Bank.

Wortham, S. C. (1990). *Tests and measurement in early childhood education.* New York: Macmillan.

Wortham, S. C. (2001). *Assessment in early childhood education* (3rd ed.). Upper Saddle River, NJ: Prentice-Hall.

Worthen, B. R. (1993). Critical issues that will determine the future of alternative assessment. *Phi Delta Kappan, 74*(6), 444-454.

APPENDIX A

GRADE ONE READINESS INVENTORY

READINESS INVENTORY WORKBOOK

66850

GRADE ONE

NAME: _____

Prepared: Core Curriculum Unit
National Assessment Programme
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3

VISUAL MOTOR COORDINATION

4

VISUAL MOTOR COORDINATION

5

VISUAL PERCEPTION - Discrimination

6

VISUAL PERCEPTION — Memory

7

VISUAL PERCEPTION -- Figure Ground

8

AUDITORY PERCEPTION -- Memory

11

9

AUDITORY PERCEPTION - Association

10

AUDITORY PERCEPTION — Listening Comprehension

11

AUDITORY PERCEPTION - Discrimination

12

NUMBER AND LETTER KNOWLEDGE
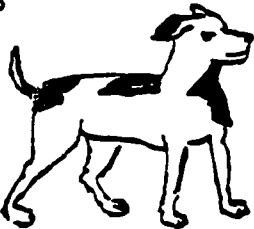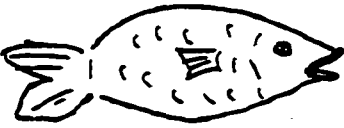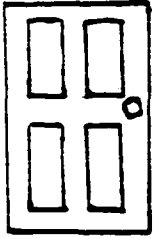
13

NUMBER AND LETTER KNOWLEDGE

14

NUMBER AND LETTER KNOWLEDGE

30	d p g
31	m w n
32	Balloon
33	This is a mango.

STUDENT REPORT FORM –TO BE SENT TO PARENTS

DATE_____

NAME OF SCHOOL_____

NAME OF CHILD_____

Male   Female

AGE_____GENDER   ⚊   ⚊

PREVIOUS SCHOOL: BASIC ⚊   PREP ⚊ NOT KNOWN ⚊

INFANT ⚊   REPEATER ⚊ NO SCHOOL ⚊

SUBTESTS	MARKS		LEVEL OF MASTERY		
	TOTAL	CHILD'S	MASTERY (M)	ALMOST MASTERY (A)	NON-MASTERY (N)
I. Visual Motor Coordination	5				
II. Visual Perception	10				
III. Auditory Perception	15				
V.Number and Letter Knowledge	10				
TOTAL	40				

Subtests Mastered:_____

Comments_____

Action to be taken:_____

_____

_____

_____

_____

Key: M - Mastery   B - Basic
        A - Almost Mastery   I - Infant
        N - Non Mastery   P - Prep
                                           R - Repeater
                                           S - No School
                                           N - Not Known

APPENDIX B

COURSE OUTLINE FOR CLASSROOM TESTING
AND MEASUREMENT

176

SUBJECT: Education

COURSE: Classroom Testing and Measurement (CTM)
                    (Ed 202 P/S)

PROGRAMME: Primary/Secondary/Post Certificate

YEAR: Two/Post Certificate

PRE-REQUISITE: Principles & Practice of Primary and/or
                    Secondary Education

DURATION: 45 hours

RATIONALE:

Jamaican classroom teachers are constantly involved in the
process of testing and evaluating students. It is imperative
that trainee teachers receive formal instruction in order to
acquire the knowledge, skills, attitudes, and applied principles
of CTM.

Classroom testing, measurement, and evaluation play very
important roles in the process of learning and teaching.
Knowledge of the principles of CTM will provide the teacher with
a systematic approach to the evaluation of students' achievement
in the classroom as well as a knowledge of the many uses of CTM.
These uses include:

a.   Testing for the purpose of giving grades (student
     evaluation). This information allows the teacher
     to evaluate the student's achievement and forms basis for
     assigning grades and other marks and for grouping students
     for academic activities.

b.   Testing for the purpose of determining the student's
     academic level of achievement (e.g., diagnostics). Test
     results give information about the student's present
     abilities and past achievement and enables the teacher to
     know the starting point to begin teaching a new concept.

c.   Testing for the purpose of enabling the teacher to
     determine whether or not the lesson has been adequately
     taught to the students (teacher evaluation). Information
     allows the teacher to check on progress of students - so
     teacher can modify his/her teaching, if necessary. This
     information also gives the teacher a standard to gauge
     his/her own effectiveness as a teacher.

GENERAL OBJECTIVES:

At the end of this course, the trainee teacher will:

1. have the required knowledge of the various types of evaluative techniques that can be used in the classroom.

2. use the principles of CTM to manufacture reliable and valid tests for use in the classroom.

3. have adequate knowledge of the evaluative measurements used by other professionals in related fields.

4. be able to apply the principles of CTM to monitor and evaluate his or her student's ongoing progress and academic achievement as well as being able to monitor and evaluate the teacher's own method of teaching.

UNIT I

TITLE: The Place of Testing, Measurement and Evaluation in Education

TIME: 3 hours

INSTRUCTIONAL OBJECTIVES

Upon finishing this unit, the trainee teacher will:

1. list the major reasons why CTM is included in the curriculum.

2. define and distinguish between the terms: test, measurement, and evaluation.

3. identify at least 4 reasons for the purposes of evaluation in the classroom.

CONTENT	ACTIVITIES
1. Definition of terms: Testing, Measurement, and Evaluation	1. List several instructional activities that can be improved by the use of tests.
2. Reasons for testing, measurement, and evaluation	2. Discussion on how tests are appropriate/inappropriate
3. Role of evaluation in —and education, namely: planning, implementing, assessing, and feedback.	3. Illustrations, diagrams, charts

UNIT 2

TITLE: Types of Tests Used in Education

TIME: 3 Hours

INSTRUCTIONAL OBJECTIVES:

At the end of Unit 2, the student will:

1.   describe the characteristics of good tests, namely:
      reliability, validity, and usability.

2.   identify and describe different types of tests, namely:
      achievement, placement, selection, diagnostic, intelligence,
      and aptitude.

3.   explain the purposes of the different types of tests
      mentioned in Objective 2.

4.   differentiate between test classifications, namely: norm-
      referenced, group-referenced, and criterion-referenced
      tests.

'5.   identify some of the common terms used in describing tests,
      namely: objective, subjective, standardized, informal (also
      called classroom or teacher-made).

CONTENT	ACTIVITIES
1. Characteristics: reliability, validity, usability	1. Examine different types of tests
2. Types of tests used in education (Objective 2)	2. Discussion of cultural bias of some tests
3. Purposes of tests.	3. Group activity
4. Classifications (Objective 4)	4. Research and debate on the use/misuse of some tests used in the educational setting
5. Common terms (Objective 5)	

UNIT 3

TITLE: Formulating Objectives in the Domains of Learning

TIME: Suggested NEW time: 3 - 4 Hours

INSTRUCTIONAL OBJECTIVES:

At the end of Unit 3, the student will

1. differentiate between Goal, Aims, Objectives, and Activities.

2. state the role and purposes of objectives in the teaching and learning situation.

3. identify the three parts of an objective, namely: action, conditions, and criteria.

4. differentiate between general and specific objectives

5. construct measurable objectives for a unit plan containing the three different parts.

6. identify and describe criteria for evaluating objectives and the applications of these criteria.

7. construct general and specific objectives for a unit plan.

8. formulate objectives according to specific learning outcomes, namely: knowledge, understanding, and application.

9. modify poorly constructed objectives.

CONTENT	ACTIVITIES
1. explanation of terms: general and specific objectives	1. write specific and general objectives for the CTM course
2. general overview of specific domains: cognitive, affective, psychomotor	2. critically analyze given objectives
	3. list advantages of using instructional objectives as learning outcomes
3. instructional objectives written in behavioural terms	4. list under each objective a sample of the specific performance that pupils will show when they have achieved the objective

UNIT 4

TITLE: Test Construction

TIME: 12 Hours

INSTRUCTIONAL OBJECTIVES

At the end of Unit 4 the student teacher will

1. differentiate between objective and subjective test items, and fixed and free choice test items

2. identify the 7 types of test items, namely: unstructured, matching, true/false, other two-choice, completion, multiple choice, essay

3. identify and state the principles and procedures associated with each of the 7 types of test items

4. construct sample items for a given objective using each of the 7 item types (if appropriate)

5. distinguish between the different characteristics or features of the 7 item types and the testing situation in which the item type is best used

6. arrange test items according to criteria (e.g., difficulty levels, instructional levels)

7. design a table of specifications

8. be proficient in designing criteria for marking the 7 test items

CONTENT	ACTIVITIES
1. Classification of test items (Objective 1)	1. Criticize given examples of test items and suggest improvements
2. 7 item types (Objective 2)	2. Formulate test items
3. Characteristics and guidelines for writing each type of test format (including difficulty levels and instructional levels)	3. Design Table of Specifications
4. Testing situations appropriate for the 7 item types	4. Formulate marking schemes for each of the 7 test items (including essay items!)

UNIT 4 (Test Construction - cont.)

CONTENT	ACTIVITIES
5. Table of Specifications - definition, use, design, etc.	5. Write test items for different levels of difficulty/ instruction
	6. Discussion/debate of advantages/disadvantages of each type of test item

UNIT 5

TITLE: Administration & Analysis of Classroom Tests

TIME: 12 Hours

INSTRUCTIONAL OBJECTIVES:

At the end of Unit 5 the student will

1. examine the factors affecting the administration of classroom tests

2. justify the selection of different grading schemes (e.g., criterion-referenced, group-referenced)

3. describe the individual applications of test data to include (a) monitoring and certifying student progress, (b) diagnosing individual strengths and weaknesses, (c) prescribing instructional experiences, (d) providing student feedback, and (e) grouping students for academic instruction

4. identify the characteristics of norm-referenced tests, namely: item revisions, standard instructions, norms and interpretations based on them

5. identify the characteristics of criterion-referenced tests, namely: based on objectives, designed to be appropriate, measuring performance, and using predetermined cutoffs.

6. describe the test item file as a strategy for improving teacher-made tests.

7. assign marks and report student progress (as in report cards)

UNIT 3 (Administration and Analysis of Classroom Tests - cont.)

CONTENT	ACTIVITIES
1. Procedures to be used before, during, and after testing (e.g., organizing the students, recording scores)	1. determine the grading systems used in different schools and debate their uses
2. Writing a test - selection of items, time allowed, etc.	2. score the same set of marks in different ways
3. Characteristics of scoring procedures (as in Objectives 4 and 5)	3. look at test results and evaluate them for validity, reliability, and usefulness
4. Determining item effectiveness	4. Build a test item file
5. Test item files - description, use, application	
6. Index of item difficulty	
7. Item analysis for diagnostic and instructional purposes	

UNIT X

TITLE: Elementary Statistics for the Classroom Teacher

TIME: 3 - 6 hours

INSTRUCTIONAL OBJECTIVES:

At the end of Unit X, the trainee student will have a basic knowledge of the descriptive statistics used in measurement and evaluation of his/her students. This knowledge entails the following:

1.   definitions and computations of measures of central tendency, namely: mode, mean, medium

2.   definitions and computations of measures of dispersion (variability), namely: range, deviation

3.   definitions of other terms commonly used in CTM, namely: correlation, normal curve, normal distribution, standard error, skewed results

UNIT X (Elementary Statistics for the Classroom Teacher - cont..)

INSTRUCTIONAL OBJECTIVES (cont.)

4.   grouping of scores into frequency distributions /histograms/
      ranking scores

5.   formulating marking/grading schemes

CONTENT	ACTIVITIES
1. Definitions and computations of terms as in Objectives 1 and 2	1. Practice exercises using actual classroom tests
2. Definitions of terms in Objective 3	2. Debate on the usefulness of statistics used in CTM
3. Using test scores to evaluate reliability and validity of tests	3. Discussion on "correlations" and "causes"
4. Grouping of scores to determine curve and test for skewedness	4. Demonstration on different ways to interpret scores
5. Graphic presentation of frequency distributions, e.g., histogram	

APPENDIX C

LETTER OF INTRODUCTION/DESCRIPTION OF STUDY
TO SCHOOL PRINCIPALS

185

Letter of Introduction/Description of Study to School Principals

Department of Elementary Education
Faculty of Education
551 Education Building South
University of Alberta
Edmonton, AB
Canada T6G 2G5

Date - TBA

The Principal
Name of School
Address of School
Kingston or St. Andrew
Jamaica, West Indies

Dear Principal,

My name is Donna Chin Fatt. I am currently on study leave from my position as senior lecturer in the Education Department at St. Joseph's Teachers' College, in order to complete my doctoral studies at the University of Alberta. Through this letter, I would like to request your school's participation in a study which I am conducting on the assessment practices of Grade 1 teachers in Kingston and St. Andrew.

The aim of the study is to find out: (a) what Grade 1 teachers' assessment practices are in the Corporate Area, (b) the kinds of information which are generated from these assessment practices, and (c) the decisions taken as a result of such information. Data collection will be conducted through the use of a survey and follow-up interviews. The survey will be administered to 200 Grade 1 teachers. Following this survey, a sample of 15 of these teachers, who give their consent to participate further in the study, will be interviewed independently for clarification and elaboration of their responses on the questionnaire, and other issues related to their assessment practices. I hope to administer the survey questionnaire in June, and conduct the interviews between September and December.

I will be in Jamaica by the end of May. I will then contact you, in order to arrange for a date and time mutually agreeable to the Grade 1 Teachers at your school, when the survey questionnaire can be administered. I would appreciate your sharing this correspondence with the Grade 1 teachers. Please be assured that all activities related to, and resulting from this research will adhere to the requirements of the Research and Ethics Committee of the Department of Elementary Education at the University of Alberta, and the approval of the Ministry of Education, Youth and Culture. Therefore, all information gathered will remain confidential, and the identity of participating teachers will remain anonymous. If at any time you have questions concerning this research,

please do not hesitate to contact me at the above address, or after May 26 at 977-2109. I sincerely appreciate your consideration of this request.

Yours sincerely,

_____
Donna Chin Fatt

APPENDIX D

LETTER OF INVITATION TO GRADE 1 TEACHERS

188

Letter of Invitation to Grade 1 Teachers

Department of Elementary Education
Faculty of Education
551 Education Building South
University of Alberta
Edmonton, AB
Canada T6G 2G5

Date - TBA

Dear Grade 1 Teacher,

My name is Donna Chin Fatt. I am currently on study leave from my position as senior lecturer in the Education Department at St. Joseph's Teachers' College, in order to complete my doctoral studies at the University of Alberta. Through this letter, I would like to request your participation in a study, which I am conducting on the assessment strategies used by Grade 1 teachers in an urban area of Jamaica.

You have been selected because you are a Grade 1 teacher. Enclosed is a survey, which I would appreciate very much your completing and returning to me on [date TBA], when I visit your school again.

All your responses will be treated with strict confidentiality, and pseudonyms will be assumed throughout the research reports. You are free to withdraw from the study at any time, without penalty.

I appreciate your cooperation in completing the questionnaire. If at any time you have any questions concerning this research, please contact me at 977-2109.

Yours sincerely,

_____

Donna Chin Fatt

APPENDIX E

CONSENT FORM FOR GRADE 1 TEACHERS

190

Consent Form for Grade 1 Teachers

Dear Teachers,

      I would like to interview a small number of Grade 1 teachers about their assessment practices. Interview questions will focus on the kinds of decisions which result from the various assessment strategies you use. The interviews will be audiotaped and transcribed. If you are willing to participate in this phase of the study, please fill in your name on the agreement form below. I will contact you subsequently, and make arrangements convenient to you.

      All of your responses will be treated with strict confidentiality, and pseudonyms will be used in my research reports. You are free to withdraw from the study at any time, without penalty.

Thank you,

_____

Donna Chin Fatt

===

By filling in the form below, I am giving my consent to participate further in this study.

I, _____ consent to participate further in this study. I understand
such   Please write your name
participation will include interviews and observations of my assessment practices in the classroom.

_____   _____
Signature   School address

_____   _____
Date

                                   _____
                                   Contact telephone number

Thank you for participating in this study.

APPENDIX F

SURVEY ON ASSESSMENT STRATEGIES USED IN
GRADE 1 CLASSES IN JAMAICA

Survey on Assessment Strategies Used in
Grade 1 Classes in Jamaica

1. **Demographics**

a.   School name: _____

b.   Type of school: [ ] all-age   [ ] primary   [ ] other _____
   (please check)   (please specify)

c.   School enrolment: _____

d.   Number of Grade 1 classes: _____

e.   Number of pupils in my class: _____ (total)
                                                  _____ boys
                                                  _____ girls

f.   Average age of pupils in my class   _____

g.   I am: [ ] under 20   [ ] 36 - 40   [ ] 56 - 60
   (Please check   [ ] 21 - 25   [ ] 41 - 45   [ ] over 60
   the correct range) [ ] 26 - 30   [ ] 46 - 50
                       [ ] 31 - 35   [ ] 51 - 55

h.   I am: [ ] female
   (please check)   [ ] male

i.   I have taught for: _____ years as a pretrained teacher (before teachers' college)

                               _____ years as a trained teacher (after teachers' college)

j.   I have had experience teaching: Infants
   (Please circle all that apply)   Grade 1   2   3   4   5   6
                                    Other grades (please specify) _____

k.   I received teacher-training in: (Please check all that apply, and indicate at which institution; e.g., Shortwood, Mico, St. Joseph's)

[ ] Early Childhood Education (3-8 yrs.)	[ ] Name of institution: _____ [ ] Dates of attendance: _____
[ ] Primary Education (lower primary, 6-8 yrs.) or (upper primary, 8-12 yrs.)	[ ] Name of institution: _____ [ ] Dates of attendance: _____
[ ] Secondary Education (junior secondary, 12-15 yrs.) or (secondary, 15 and up yrs.)	[ ] Name of institution: _____ [ ] Dates of attendance: _____
[ ] Special Education	[ ] Name of institution: _____ [ ] Dates of attendance: _____
[ ] Upgrading to Diploma	[ ] Name of institution: _____ [ ] Dates of attendance: _____
[ ] Other (please specify)	[ ] Name of institution: _____ [ ] Dates of attendance: _____

l.   My educational qualifications include: (Please check all that apply)

[ ] Certificate in Education
[ ] Diploma in Education
[ ] First degree [ ] B.A. [ ] B.Ed.
                  [ ] B.Sc. [ ] Other
[ ] Master's degree
[ ] Other (please specify) _____

2.   Daily Grade 1 Classroom Activities

a.   In my class, I follow a timetable: (please check your answer)   [ ]Yes   [ ] No   [ ] Sometimes

b.   I use a variety of teaching methods: (please check your answer)   [ ]Yes   [ ]No

c. The teaching method(s) I find **most** useful in Grade 1 is/are:
(If additional space is needed, please use the back of this page.)

_____
_____
_____
_____
_____
_____

d. I do my lesson planning:
(please check all that apply)

[ ] daily
[ ] weekly
[ ] bi-monthly
[ ] monthly
[ ] per term
[ ] other (please specify)_____

e. In my school, lesson planning
is carried out by:
(please check all that apply)

[ ] each teacher
[ ] several teachers in each grade
[ ] all teachers in each grade
[ ] other (please specify)_____

f. My lesson plans are submitted to:
(please check all that apply)

[ ] Principal
[ ] Head of section
[ ] Senior teacher
[ ] other (please specify)_____

3. **Assessment Strategies**

a. Assessment means:

_____
_____
_____
_____

b.   Listed below are the assessment strategies that I use in my Grade 1 class. Beside each strategy I indicate:

    i.   My reason for using each strategy.

    ii.   When and how I make use of each strategy.

    iii.   How often I use each strategy.

    iv.   How I make use of the information gained.

Type of assessment strategy	Why I use this strategy	When and how I use this strategy	How often I use this strategy	How I use the information

(If additional space is needed, please use the back of this page)

c.   The strategy I use **most** frequently is: _____
      because: _____

      _____

d.   The strategy I use **least** frequently is: _____
      because: _____

      _____

e.   How often do I assess my pupils? _____

f.   Why? _____

      _____

4.   Recording and Reporting

a.   I keep track of the information gained from assessment strategies in the following
      ways: _____

      _____

      _____

b.   How do I make use of this information for reporting purposes? _____

      _____

      _____

c.   On my report cards, I give grades.   [ ] Yes
                                                     [ ] No

d.   On my report cards, I write comments.   [ ] Yes (please answer 4e and 4f)
                                                     [ ] No (please go to Section 5)

e.   Three comments/remarks that I frequently make on report cards are (e.g. tries
      hard):
      i.   _____
      ii.   _____
      iii   _____

f.   What kind of information do I use to make the comments on my report cards?

      _____

      _____

5. **Assessment and Testing**

a.   Please check one of the following responses:
[ ] Testing and assessment are the same
[ ] Testing is part of assessment
[ ] Testing and assessment are different

b.   The reason for my answer is: _____

_____

_____

c.   I see the strengths of assessment as: _____

_____

_____

d.   My reservations about assessment are: _____

_____

_____

If you indicated that assessment and testing are different in 5a, then

e.   I see the strengths of testing as: _____

_____

_____

f.   My reservations about testing are: _____

_____

_____

6. **Grade One Readiness Inventory**

a.   I administer the Grade One Readiness   [ ] Yes
     Inventory to my class.   [ ] No

b.   I administer this Inventory in: [ ] September [ ] February
     (please check all that apply)   [ ] October   [ ] March
                                               [ ] November   [ ] April
                                               [ ] December   [ ] May
                                               [ ] January   [ ] June

c.   I make use of the Readiness Inventory in the following way(s): _____

_____

_____

_____

_____

7. The following factors (e.g., experience, teacher preparation, inservice workshops, the course Classroom Testing & Measurement) have influenced my assessment practices:

8. I would like to make the following additional comments on the assessment practices that I use in teaching Grade 1:

APPENDIX G

INTERVIEW SCHEDULE

200

Interview Schedule

*Possible questions for Grade 1 Teachers

1. How many children do you have in your class? How do you find the children as a group? How do they compare with the other Grade 1 classes?

2. What are your views of the National Assessment Programme? How has the Grade One Readiness Inventory affected what you do in your class?

3. What are your current views of assessment and its role in the classroom? What is your understanding of the term assessment?

4. Tell me about some of the factors which may have influenced your views of assessment in the classroom.

5. Tell me about the teacher's role in assessing her pupils' performance.

6. In your role as a teacher, what do you assess and how do you go about doing it?

7. How do you view the role of tests and testing in the classroom?

8. To what extent do you use a variety of assessment strategies in your teaching? Tell me more about the variety of strategies you use.

9. Which assessment strategy have you found most useful? In what ways did you find it useful?

10. Which assessment strategy have you found least useful? Why?

11. How did you make use of the information gained from assessment?

12. To what extent is what you do in the classroom affected or influenced by the information gained from the different forms of assessment?

13. Were you satisfied with the assessment strategies that you used? Why, or why not?

14. What improvements to your assessment procedures would you like to carry out?

15. Is there anything else that you would like to say about assessment or the strategies used for assessment?

* Order of questions will be flexible, and result from the informality of the interview.

APPENDIX H

LETTER TO PERMANENT SECRETARY,
MINISTRY OF EDUCATION, YOUTH, & CULTURE

202

Letter to Permanent Secretary, Ministry of Education, Youth, & Culture

Department of Elementary Education
Faculty of Education
551 Education Building South
University of Alberta
Edmonton, AB
Canada T6G 2G5

April 24, 1998

The Permanent Secretary
Ministry of Education, Youth & Culture
2 National Heroes Circle
Kingston 4
Jamaica, West Indies

Dear,

My name is Donna Chin Fatt. I am currently on study leave from my position as senior lecturer in the Education Department at St. Joseph's Teachers' College, in order to complete my doctoral studies at the University of Alberta. As the focus of my research involves a study of the assessment practices of Grade 1 teachers in the Corporate Area, I hereby seek the permission and approval of your office to proceed with the required field work.

The aim of the study is to find out: (a) what Grade 1 teachers' assessment practices are in the Corporate Area, (b) the kinds of information which are generated from these assessment practices, and (c) the decisions taken as a result of such information. Data collection will be conducted through the use of a survey and follow-up interviews. The survey will be administered to 200 Grade 1 teachers. Following this survey, a sample of 15 of these teachers, who give their consent to participate further in the study, will be interviewed for clarification and elaboration of their responses on the questionnaire, and other issues related to their assessment practices. I hope to administer the survey questionnaire in June, and conduct the interviews between September and December, 1998.

Principals will be sent a description of the study. Very soon after my arrival in Jamaica at the end of May, I hope to contact these Principals to negotiate a convenient date and time for administering the survey to the Grade 1 teachers at each school. Interviews with individual teachers will be similarly arranged according to their convenience. All activities related to, and resulting from this research, will adhere to the requirements of the Research and Ethics Committee of the Department of Elementary Education at the University of Alberta. While all information gathered will remain

confidential, and the identity of participants will remain anonymous, upon completion of this study, I would be happy to share the findings with you.

As I will not be in Jamaica until the end of May, please let me know by fax (403 492 0001), if possible, what further procedure I need to undertake before going into the schools. If at any time you have questions concerning this research, please do not hesitate to contact me at the above address, or after May 26 at 977-2109. I sincerely appreciate your consideration of this request, and look forward to your response.

Yours sincerely,

_____

Donna Chin Fatt

STUDY DESCRIPTION/LETTER OF INTRODUCTION:
LETTER TO REGIONAL DIRECTOR, REGION 1
MINISTRY OF EDUCATION, YOUTH, & CULTURE

Study Description/Letter of Introduction: Ministry of Education, Youth, & Culture

Department of Elementary Education
Faculty of Education
551 Education Building South
University of Alberta
Edmonton, AB
Canada T6G 2G5

Date - TBA

Director of Region 1
Regional Division
Ministry of Education, Youth & Culture
2 National Heroes Circle
Kingston 4
Jamaica, West Indies

Dear ,

    My name is Donna Chin Fatt. I am currently on study leave from my position as senior lecturer in the Education Department at St. Joseph's Teachers' College, in order to complete my doctoral studies at the University of Alberta. As the focus of my research involves a study of the assessment practices of Grade 1 teachers in the Corporate Area, I hereby seek the permission and approval of your office to proceed with the required field work.

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    Principals will be sent a description of the study. Very soon after my arrival in Jamaica at the end of May, I hope to contact these Principals to negotiate a convenient date and time for administering the survey to the Grade 1 teachers at each school. Interviews with individual teachers will be similarly arranged according to their convenience. All activities related to, and resulting from this research, will adhere to the requirements of the Research and Ethics Committee of the Department of Elementary Education at the University of Alberta. While all information gathered will remain

confidential, and the identity of participants will remain anonymous, upon completion of this study, I would be happy to share the findings with you.

As I will not be in Jamaica until the end of May, please let me know by fax (403 492 0001), if possible, what further procedure I need to undertake before going into the schools. If at any time you have questions concerning this research, please do not hesitate to contact me at the above address, or after May 26 at 977-2109. I sincerely appreciate your consideration of this request, and look forward to your response.

Yours sincerely,

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Donna Chin Fatt

enc. Survey questionnaire