The Relationship Between Demographic and Attitudinal Characteristics of Primary-School Teachers and Implementation of the Continuous Assessment Program in Swaziland

Hibajene Monga Shandomo

Andrews University

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The relationship between demographic and attitudinal characteristics of primary-school teachers and implementation of the continuous assessment program in Swaziland

A Dissertation
Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

by
Hibajene Monga Shandomo
August 2002
THE RELATIONSHIP BETWEEN DEMOGRAPHIC AND ATTITUDINAL CHARACTERISTICS OF PRIMARY-SCHOOL TEACHERS AND IMPLEMENTATION OF THE CONTINUOUS ASSESSMENT PROGRAM IN SWAZILAND

A dissertation presented in partial fulfillment of the requirements for the degree Doctor of Philosophy

by

Hibajene Monga Shandomo

APPROVAL BY THE COMMITTEE:

Chair: Jimmy Kijai

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James R. Jeffery

Date approved: July 23, 2002
ABSTRACT

THE RELATIONSHIP BETWEEN DEMOGRAPHIC AND ATTITUDINAL CHARACTERISTICS OF PRIMARY-SCHOOL TEACHERS AND IMPLEMENTATION OF THE CONTINUOUS ASSESSMENT PROGRAM IN SWAZILAND

by

Hibajene Monga Shandomo

Chair: Jimmy Kijai
ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title: THE RELATIONSHIP BETWEEN DEMOGRAPHIC AND ATTITUDINAL CHARACTERISTICS OF PRIMARY-SCHOOL TEACHERS AND IMPLEMENTATION OF THE CONTINUOUS ASSESSMENT IN SWAZILAND

Name of researcher: Hibajene Monga Shandomo

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Date completed: August 2002

Problem

The purposes of this study were to determine the extent to which primary school teachers were implementing the Continuous Assessment Program (CAP) and to examine personal and institutional factors that may be related to the implementation of the program.

Method

A questionnaire designed to measure degree of implementation and attitude toward the Continuous Assessment Program was administered to a stratified random sample of 600 Grade 1 to Grade 7 teachers from 54 schools. Personnel from the National
Curriculum Center (NCC) delivered and collected the questionnaires from each school. Completed questionnaires were then forwarded to the researcher. Data were coded and entered into the computer. Data analysis was done using the Statistical Packages for the Social Sciences (SPSS). Frequency distribution, means and standard deviation were used to summarize the data. Null hypotheses were tested using Chi-Square test of association, Pearson product–moment correlation and multiple regression analysis. Level of significance was set at 0.05.

Results

Six of the null hypotheses were rejected. One was retained. Three major findings are that the Continuous Assessment Program is being partially implemented by teachers. The least qualified teachers are implementing Continuous Assessment more than their more highly qualified colleagues. Second, there are significant relationships between implementation and the variables of Educational Attainment, Attitude Toward the CAP, Perceived Role of the Head-Teacher, Perceived Adequacy of Support of Ministry of Education (MoE), and Perceived Adequacy of Initial and Ongoing Training. Third, the two most important factors that account for degree of implementation of CAP are attitude toward the CAP and perceived adequacy of initial and ongoing training. Major problems teachers faced included oversized classes that made it difficult for them to do appropriate remediation and enrichment.

Conclusion

Continuous Assessment Program is being partially implemented by the teachers. The problems that teachers face may imply that unless the Ministry of Education
provides teachers with resources with which to implement the Continuous Assessment Program the program may not be thoroughly implemented and of benefit to the students.
To Malende Nachimwe Shandomo, my daughter,
for that big sacrifice of growing
up with this dissertation
# TABLE OF CONTENTS

LIST OF FIGURES .................................................................................................................... ix

LIST OF TABLES ....................................................................................................................... x

LIST OF ABBREVIATIONS ................................................................................................... xii

ACKNOWLEDGMENTS .......................................................................................................... x iii

CHAPTER

1. BACKGROUND ............................................................................................................... 1

   The Kingdom of Swaziland ........................................................................................ 1
   The Education System ............................................................................................. 2
   Enrollment in Primary Schools .............................................................................. 3
   National Curriculum Center ................................................................................. 4
   Teachers in Swaziland ............................................................................................. 4
   Statement of the Problem ....................................................................................... 5
   Purpose of the Study ............................................................................................... 9
   Major Research Questions .................................................................................... 10
   Conceptual Framework .......................................................................................... 11
       Characteristics of the Change or Innovation .................................................. 12
       Factors Related to Teachers Themselves ......................................................... 14
       Local Characteristics ....................................................................................... 15
       External Factors .............................................................................................. 16
       Models of Implementation ............................................................................... 16
   Significance of the Study ....................................................................................... 17
   Definition of Terms ............................................................................................... 17
   Delimitations and Limitations .............................................................................. 18
   Organization of the Study ..................................................................................... 18

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
III. METHODOLOGY .................................................................................................69

Introduction ........................................................................................................69
Research Design ................................................................................................69
Population and Sample .....................................................................................71
  Purposive Sampling for Pilot Study ...................................................71
The Need for Piloting ........................................................................................73
The Sample for the Main Study .......................................................................73
  Independent and Dependent Variables .............................................74
  Educational Attainment .......................................................................75
  Work Experience in Continuous Assessment ..................................75
  Teachers’ Attitude Toward CA ...........................................................76
  Perceived Ministry of Education Support .............................................76
  Perceived Adequacy of Initial and Ongoing Training of Teachers ........................................................................78
  Perceived Role of the Head-Teacher .................................................78
Instrumentation ..................................................................................................79
Justification ........................................................................................................79
Defining Objectives ..........................................................................................80
Writing Items That Measured Different Variables ........................................80
Construction of the General Format .............................................................81
Validation of the Instrument ..........................................................................81
Piloting the Questionnaire ................................................................................83
Feedback From the Pilot Study ........................................................................84
Description of the Final Format of the Instrument .......................................84
Reliability of the Instrument ............................................................................85
Procedure ...........................................................................................................86
Data Analysis .....................................................................................................89
  Demographic Data ...............................................................................89
  Major Research Questions ..................................................................89
Testing the Hypotheses .....................................................................................91
Data Analysis for Open-ended Section..........................................................95
  Entering All Responses From Each Questionnaire ..........................95
  Scanning All Data for Possible Themes and Patterns ..................................96
  Coding the Main Themes or Ideas .....................................................96
  Narrowing the Focus ............................................................................98

IV. PRESENTATION AND ANALYSIS OF DATA .........................................................99

Overview ............................................................................................................99
Description Analysis of the Sample ................................................................99
Extent or Degree of Implementation ...............................................................102
  Using Clearly Defined Objectives ...................................................102
  Giving Criterion Referenced Tests ..................................................102
  Providing Remedial Activities to Non- Masters ............................102

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Providing Enrichment Activities ...................................................... 104
Keeping of Proper Records ............................................................... 104
Remedial Work Times in Each Week ............................................. 105
Enrichment Work Times in Each Week ......................................... 105
Time of the Day Remediation Is Done ........................................... 106
Teachers' Attitudes Toward the Assessment Program .................. 106
Teachers' Perceived Role of the Head-Teacher ......................... 106
Perceived Support of the Ministry of Education ............................ 107
Perceived Adequacy of Initial and Ongoing Training .................... 107
Testing Hypotheses ............................................................................... 111
General Impression of CA ............................................................... 123
Problems Encountered by Teachers in Doing CA ........................ 124
Large Class Sizes ........................................................................... 124
Too Much Paperwork .................................................................... 125
Unavailability of Instructional Materials ....................................... 127
Time to Do CA ................................................................................. 128
Unit and Term Examinations .......................................................... 128
Tests Arriving Late in Schools ....................................................... 130
Follow-up Visits From INSET or Inspectors or Both ................. 130
Not Having Been Trained in CA ..................................................... 131
Leaders Who Do Not Take Teachers' Concerns Seriously in the Continuous Assessment Program ........................................... 131
Schools Do Not Have Equipment Needed to Implement the Continuous Assessment Program .................................................... 132
Comments on the Monitoring and Implementation of CA ............. 133
Summary .......................................................................................................... 134

V. SUMMARY, DISCUSSIONS, CONCLUSION, IMPLICATIONS, AND RECOMMENDATIONS ........................................... 136

Introduction ......................................................................................... 136
Summary of Methodology ............................................................... 136
Summary of Findings .......................................................................... 137
Discussion ............................................................................................... 138
Extent or Degree of Implementation .............................................. 138
Using Well-Stated Objectives ......................................................... 138
Giving Criterion Referenced Tests ............................................... 140
Providing Remediation in the Continuous Assessment Program ............. 141
Conducting Enrichment ............................................................... 144
Record-keeping .................................................................................. 145
General Impression of CA ............................................................... 146
Problems Encountered in Doing CA ............................................... 147

vii

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Innovation Use, Level of Use, and Stages of Concern in the Continuous Assessment Program ...........................................147
Factors Related to the Implementation of the Continuous Assessment Program .................................................................150
Factors That Support the Continuous Assessment Implementation .........................................................................................150
Attitude Toward the Continuous Assessment Program .............................................................................................................151
Initial and Ongoing Training ....................................................................................................................................................153
Educational Attainment ..........................................................................................................................................................154
Perceived Role of the Head-teacher ....................................................................................................................................155
Support of the Ministry of Education ..................................................................................................................................156
Teaching Experience in the Continuous Assessment Program .....................................................................................................156
Conclusion .................................................................................................................................................................................157
Recommendations ........................................................................................................................................................................158
Recommendations for the Ministry of Education .......................................................................................................................158
Recommendations for Further Research ..................................................................................................................................159
Appendix
A. TABLES ..............................................................................................................................................................................162
B. QUESTIONNAIRES ...........................................................................................................................................................167
C. LETTERS ..............................................................................................................................................................................178
REFERENCE LIST ........................................................................................................................................................................185
LIST OF FIGURES

1. Mastery Learning Model of Swaziland's Primary Schools .................................................. 7
2. Interactive Factors Affecting Implementation .................................................................. 13
3. The Evolution of Teacher Development at Ocean Side .................................................. 35
4. A Problematic Pattern of Implementation and Outcomes of Innovative Projects .......................................................... 55
5. A Simplified Overview of the Change Process ................................................................. 56
6. The Stratified Random Sample for the Study .................................................................. 74
7. Conceptual Model of the Research .................................................................................. 77
8. Process Used in Developing the Continuous Assessment (CA) Instrument .................. 79
9. Distribution of Questionnaires for Main Study ................................................................. 87
LIST OF TABLES

1. Demographics of Pilot Study Sample .................................................................72

2. Scale Means, Standard Deviations, and Reliability Coefficients for Variables in the CA .................................................................86


4. Questions and Responses for Qualitative Data .....................................................97

5. Demographics of the Sample ..............................................................................101

6. Means and Standard Deviations of Extent or Degree of Implementation ..........103

7. Number of Times in a Week Remedial Work Is Given .......................................105

8. Means and Standard Deviations of Attitude Toward the Continuous Assessment Program .....................................................................................108


10. Number of Times in the Year Inspectors or INSET Visit Schools .......................109

11. Means and Standard Deviation of Perceived Adequacy of Initial and Ongoing Training of the Continuous Assessment Program .................................................................................110

12. Means and Standard Deviations of Implementation by Level of Education .........113

13. Univariate Analysis of Variance of Tests Between-Subjects Effects of Degree of Implementation by Education .................................................................................114

14. Means, Standard Deviations, and Mean Differences for Degree of Implementation by Level of Education: Pair-wise Comparisons .................................................................................114

15. Crosstab Level of Education by How Many Times Remedial Work Is Given in a Week ..................................................................................................................115

17. Tests of Between-Subjects Effects; Dependent Variable: Degree of Implementation ...............................................................................................................118

18. Means, Standard Deviations, and Coefficient Correlations of Implementation and Attitude toward the CAP, Perceived Support From the MoE, Perceived Adequacy of Training, Perceived Role of the Head-Teacher ........................................118

19. Means and Standard Deviations for Degree of Implementation and Predictors......121

20. Matrix Showing the Intercorrelations Among the Variables ........................................121

21. Regression Coefficients of Teaching Experience in CA, Attitude Toward the Continuous Assessment Program, Perceived Adequacy of Training, Perceived Role of Head-Teacher, Years of Education (Educational Level), and Degree of Implementation .........................................................122

22. Problems Encountered During CA Implementation ..................................................126
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.Aa Ed.</td>
<td>Bachelor of Arts in Education</td>
</tr>
<tr>
<td>B. Ed.</td>
<td>Bachelor of Education</td>
</tr>
<tr>
<td>BSc</td>
<td>Bachelor of Science</td>
</tr>
<tr>
<td>CA</td>
<td>Continuous Assessment</td>
</tr>
<tr>
<td>CAP</td>
<td>Continuous Assessment Program</td>
</tr>
<tr>
<td>CRT</td>
<td>Criterion Reference Test</td>
</tr>
<tr>
<td>INSET</td>
<td>In-service and Education Training at William Pitcher</td>
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<tr>
<td>MoE</td>
<td>Ministry of Education</td>
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<tr>
<td>NCC</td>
<td>National Curriculum Center</td>
</tr>
<tr>
<td>NERCOM</td>
<td>National Educational Review Commission</td>
</tr>
<tr>
<td>NRT</td>
<td>Norm Reference Test</td>
</tr>
<tr>
<td>PTC</td>
<td>Primary Teacher’s Certificate</td>
</tr>
<tr>
<td>PTD</td>
<td>Primary Teacher’s Diploma</td>
</tr>
<tr>
<td>STC</td>
<td>Secondary Teacher’s Certificate</td>
</tr>
<tr>
<td>STD</td>
<td>Secondary Teacher’s Diploma</td>
</tr>
<tr>
<td>UPE</td>
<td>Universal Primary Education</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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CHAPTER I

BACKGROUND

The Kingdom of Swaziland

The Kingdom of Swaziland is a small landlocked country in southeastern Africa, with borders to South Africa in the north, west, and south, and Mozambique in the east. It covers an area of 17,364 square kilometers. The kingdom gained independence from the United Kingdom in 1968. At that time Swaziland’s population was estimated at 400,000. Today its population is estimated to be 1,104,343. The majority of the population shares a common language, tradition, and history. With the monarchy acting as a unifying factor, the kingdom has a long history of political stability and peaceful co-existence with neighboring countries (Ministry of Education [MoE], 1994a). Swaziland is divided into four administrative regions: Hhohho, Lubombo, Manzini, and Shiselweni. The official languages are siSwati and English.

The Education System

The education system of Swaziland includes primary, secondary, tertiary, preschool, and adult education. Primary education is 7 years, and the official age of entry is 6 years. Secondary school includes 3 years of junior secondary and 2 years of high school.

Swaziland has one university, the University of Swaziland (UNISWA), with
about 2,000 students. In 1995 there were about 1,200 students in technical and vocational institutions and 600 students in teacher training (MoE, 1995).

Private interests run the pre-schools in Swaziland, but a national pre-school core curriculum has been developed by government officials (MoE, 1993). Only 5% of children ages 3 through 5 were estimated to be in pre-schools in 1996 (MoE/UNICEF, 1996b). For adult education, the government has established some rural education centers and an inspectorate specifically for adult education (MoE, 1994a).

Compared to many other countries in Africa, Swaziland’s government expenditure on education has been fairly high, about 28% of the national budget. Parents pay school fees and provide uniforms for their children at primary and secondary level. This is about 8% to 9% of total primary costs. Amazingly, education is free at the tertiary level (MoE, 1994a).

**Enrollment in Primary Schools**

Swaziland has a high population growth, which was estimated at about 2.02% per annum in 1996 (MoE/UNICEF, 1996b, p. 1). The population is young. Forty-six percent of the population is under the age of 15, 52% is between 15-64 years, and only 2% are 65 years of age and over. The urban population is 23% of the total population with a high growth rate. In 1992 women’s life expectancy was 59.2 years while men’s life expectancy was 55.2 years. Both the fertility and mortality rates are higher in Swaziland than other countries with a similar gross national product (GNP). However, the mortality rate is declining and there are signs indicating a slow fertility decline (MoE/UNICEF, 1996b).

In the year 2000, Swaziland had a total of 538 primary schools, with 138 schools
in Hhohho region, 122 in Lubombo region, 149 in Manzini region, and 129 in Shiselweni region. In 1968 there were about 50,000 children enrolled in primary school. By 1996, these enrollments had more than tripled to about 190,000 (MoE/UNICEF, 1996b). The age of pupils in primary schools varies from 6 years to 20 years (Government of Swaziland, 1995). This means that there are over-age children in primary schools. The net enrollment rate (NER), which indicates the number of children in school within the proper age, is 79% for boys and 80% for girls. In 1985 Swaziland determined that the country had reached Universal Primary Education (UPE), which means that there are sufficient places in primary schools for all children who are of school-going age and that the system is growing sufficiently to accommodate all school-going-age children in the future (Okkimo, 1998).

National Curriculum Center

By 1974 it had become obvious that the colonial education system was not suitable to the aspirations of the new nation. Consequently, in 1975, with United States Agency for International Development (USAID) support, a National Curriculum Center (NCC) was established in Manzini. The major task for the National Curriculum Center (NCC) was the indigenization of the curriculum (MoE, 1993). In a review of the educational system contained in The First 25 Years of Independence, it is stated:

For a long time after independence children continued to be taught British history instead of Swazi history. In geography they continued to learn about the effects of glaciations, instead of causes of soil erosion in Swaziland. Our curriculum designers have worked to amend these anachronisms and replaced them with curricula that are relevant to Swaziland. (MoE, 1993, p. 5)

At present, the NCC produces all official textbooks for primary schools, and the local branch at the multi-cultural company, Macmillan, prints these books. Swaziland
was not the only African country going through such changes. But with the attainment of
independence and the transfer of power in many African countries there have been
demands for change in the structure of education, which include revising the curriculum
to make it more relevant to local needs and surroundings.

**Teachers in Swaziland**

In the year 2000, there were 5,896 primary-school teachers in Swaziland, of
which 24% were men and 76% were women. Almost 95% of these teachers are trained
(MoE/UNICEF, 1996b, p. 8). This figure, however, hides a variety of different types of
teacher training. Most teachers hold a Primary Teacher’s Certificate or Primary Lower
Certificate (MoE, 1994a). These certificates do not require the O-level completed high
school. In the year 2000, for example, the University of Swaziland produced a total of
only 203 graduates in Education. Forty-five of these were Bachelors of Education for
Secondary Education, 17 of these were Bachelors of Education for Primary Education,
another 17 of them were Bachelors of Education in Commerce, and 124 had postgraduate
certificates in Education (P.G.C.E.).

Improvements have been made in teacher training in Swaziland over the last few
years, and the last and most important changes happened through the Swaziland teacher
education project. This project was funded by the United States Agency for International
Development (USAID) and supported by Ohio University/Swaziland Teacher Education
Project. This project, among other things, replaced the existing 2-year post-Junior
Certificate program leading to a Teacher Certificate with a 3-year post-O-levels program
of studies leading to a Diploma in Education (MoE, 1993). In 1995, only 991 teachers in
primary education held a post-O-level qualification (Government of Swaziland, 1995).
The other important change has been through the Continuous Assessment (CA) project where the teachers are continuously being trained to implement the Continuous Assessment Program (CAP).

Statement of the Problem

While Swaziland concentrated on expanding its educational facilities to meet the needs of its growing population, issues of internal and external efficiency and quality of instruction were hardly being checked. The issues of what, how, and to what extent learning was actually taking place in schools were almost forgotten. With a largely academically inclined curriculum, instruction was teacher-centered and examination-driven. By the 1980s, it became inevitable for government, as a matter of urgency, to revamp its educational policy for expansion to include a focus on quality and efficiency. Thus, National Educational Review Commission (NERCOM) was launched in 1984 (MoE, 1993). The NERCOM was a locally planned and funded exercise.

One of the key findings of the NERCOM was that the system of formal education, especially at the lower level, was inefficient: at the end of the 7 years of primary education, there was a 75% pass rate. This included 1st, 2nd and 3rd class passes. Only students who were in 1st or 2nd class stood a better chance of being admitted to Junior Secondary. Although the rates were not presented, it was reported that repetition and dropout rates were high.

Central among the NERCOM's recommendations was the idea of continuous assessment (CA). CA's emphasis was on a new system of assessment, which would get away from the British model of normative testing with its focus on summative evaluation. This meant that a new emphasis on Criterion Referenced Testing (CRT) rather than the
Norm Referenced Testing (NRT) had to be introduced. In 1988, the United States Agency for International Development (USAID) entered the stage by offering support to the education sector on the basis of the NERCOM report.

The Swaziland Ministry of Education and USAID conducted many small surveys. For example, the 1989 School Mapping Survey showed that out of 100 students in a given cohort beginning school, only 25 reached the last year of primary school within 7 years and barely 19 (18.8%) entered secondary school, and only about 4 reached the 12th grade within 12 years. In the same survey, repeat rates were found to be 19% in Grade 1 and 11% in Grade 7. The dropout rates at primary-school level ranged from 4.3% in Grade 1 and up to 13.5% in Grade 7 (Magagula et al., 1995).

Further, the Education Statistics of 1990/91 revealed very similar findings to the 1989 School Mapping Survey. Their finding was that approximately 17.8% of the students graduated from the primary level within 7 years. On average, the system graduated primary-school students in about 12 years instead of 7.

By 1990, the Education Policy Management Technology (EPMT) project, a project which emphasized CA's role in education, had been negotiated, agreed to, and was ready for implementation. By 1992, schools were piloting the Continuous Assessment Program (CAP). In 1993, it was implemented nationwide.

The CA project sought the goal of increased learning outcomes through improved teaching with the following objectives: (a) teach towards clearly defined objectives, (b) prepare tests that are based on clearly stated objectives, (c) provide effective remedial instruction or enrichment, and (d) provide information that will help educational policy makers make decisions that will improve the quality of primary education.
"Conceptually, CA is a systematic, objective and ongoing process of finding out how well a student has learned the given objectives" (Pasigna, 1996, p. 2). CA is based on the principles of mastery learning (Glatthorn, 1994). The basic theory in mastery learning is that if students are given enough time and opportunity to learn, most of them will achieve a given instructional objective. The major components of the Continuous Assessment Program include writing of clearly defined objectives, giving criterion-referenced tests, providing remedial activities to non-masters, providing enrichment activities to masters, and keeping proper records. The elements are linked together as shown in Figure 1 to give the pupil the best chance of achievement.

Figure 1. Mastery Learning Model for Swaziland's primary schools. From Continuous Assessment Program Questions and Answers (p. 10), by A. L. Pasigna, 1996, Mbabane, Swaziland: Copyright 1992 by Ministry of Education.

When the CA program was first introduced nationwide in 1993, it was envisaged that, by 1999, a pronouncement would be made by the Ministry of Education to clarify to the public how CA was going to be used for making decisions to promote students to the
eighth grade (secondary level). The alternatives were:

1. To promote students to the eighth grade based on the new CA grading system, which is based on criterion referenced testing (CRT)

2. To combine CA grades with the national or public examination grade in order to obtain A, B, C, D, E, or F grades

3. To promote students who have an acceptable grade for the public examination and only use the CA-CRT results for borderline cases.

At present, it is being accepted that many years of transition time may be necessary to bridge the gap between the old and the new system. Since many of the Ministry of Education’s plans depend on a successful implementation of CA, studies to determine to what extent CA is being implemented are critically needed. However, since the implementation of CA, the studies that have sought to find out what actually is happening in schools have been few and limited in scope. In the first study (Magagula et al., 1995), also discussed in detail in chapter 2, three teams of two people each interviewed 180 teachers of either first grade or second grade. The researchers were either from the NCC or In-Service Education and Training (INSET) unit. Each team visited the school once, interviewed teachers and head-teachers and reviewed a few records. At the end of each visit, which took about one half day, each team compiled a concise report. As mentioned, this study was limited to only the teachers of two grades (1st or 2nd).

In the second study (Thwala, Hlophe, Munro, Shandomo & Dlamini, 1996), the purpose was to determine the extent to which remediation and enrichment were being implemented by third-grade teachers. Two hundred fifty-five teachers responded to a
survey questionnaire. The number of teachers sampled is not given, therefore the response rate is not known. The focus of the investigation was only the remediation and enrichment of the third-grade teachers, only two components of CA.

In the third study, conducted by Reguhild (1998), a doctoral student, the ethnographic approach was used to interview 4 head-teachers, 1 deputy head-teacher, 14 primary school teachers, and 1 CA-NCC leader, and a few (the exact number is not given) retired teachers who had been hired to draft CA instructional materials on a part-time basis. Reguhild’s purpose was to find out how the CAP had contributed to improvement of quality in primary education in Swaziland. Despite the size of samples utilized and the obvious lack of representativeness, Reguhild makes sweeping generalizations. In order to generalize the results, the present study used a survey research design whose population consisted of Swaziland’s 538 primary schools. From this population, a stratified random sample of 54 schools was drawn. All teachers in the 54 schools were invited to participate.

**The Purpose of the Study**

The purpose of the study was to investigate the extent to which the primary-school teachers in Swaziland are implementing the Continuous Assessment Program and to determine the personal and institutional factors that affect implementation. This was attempted through an examination of how program implementation varies by the demographic and attitudinal characteristics of teachers. This was captured through the following program indicators: using well-stated objectives, giving criterion referenced tests, conducting remediation and enrichment, and keeping proper records, which vary by the demographic and attitudinal characteristics of teachers.
**Major Research Question**

There were two general questions under investigation. They are:

1. To what extent are the primary-school teachers in Swaziland implementing the Continuous Assessment Program?

2. What personal and institutional factors are related to the implementation of the Continuous Assessment Program (CAP)?

The study was driven by the following specific research questions:

1. What is the relationship between teachers' educational attainment and degree of implementation of the CAP?

2. What is the relationship between teachers' work experience in CA and the degree of implementation of the CAP?

3. What is the relationship between teachers' attitude (receptivity) toward the CAP and the degree of implementation?

4. What is the relationship between the teachers' perceived support of the Ministry of Education (NCC, INSET, and Inspectorate) and the degree of implementation of the CAP?

5. What is the relationship between the teachers' perceived adequacy of initial training and ongoing training of CA and implementation?

6. What is the relationship between the teachers' perceived role of the head-teacher in the CAP and the implementation of CA?

7. Is there a linear relationship between the variables of educational attainment, work experience in CA, teachers' attitude toward CA, teachers' perceived support of the Ministry of Education (MoE), teachers' perceived adequacy of initial and ongoing
training in CA, teachers' perceived role of the Head-teacher in CA, and implementation?

Specifically, the following hypotheses were tested:

Hypothesis 1. There is a significant relationship between the teachers' educational attainment and degree of implementation of CAP.

Hypothesis 2. There is a significant relationship between the teachers' work experience in CA and the degree of implementation of the CAP.

Hypothesis 3. There is a significant relationship between the teachers' attitude toward the CAP and the degree of implementation.

Hypothesis 4. There is a significant relationship between the teachers' perceived support of the Ministry of Education (NCC, INSET, and Inspectorate) and the degree of implementation of the CAP.

Hypothesis 5. There is a significant relationship between the teachers' perceived adequacy of initial and ongoing training and the CAP and implementation.

Hypothesis 6. There is a significant relationship between the teachers' perceived role of the head-teacher in the CAP and the degree of implementation.

Hypothesis 7. There is a linear relationship between the variables of educational attainment, work experience in CA, teachers' attitude toward CA, teachers' perceived support of the Ministry of Education (MoE), teachers' perceived adequacy of initial and ongoing training in CA, teachers' perceived role of the head-teacher in CA and implementation.

Conceptual Framework

A great majority of innovations or attempted changes do not happen or get implemented in practice even where implementation was desired because of various
interrelated key factors. The assumption is that regardless of what model is used, there are still sets of factors that support implementation. These factors include the characteristics of the change being attempted; internal factors related to teachers' attitude, experience and personal theories; local factors that include the role the principal plays in creating a healthy climate in the school, and the roles the community and districts play in supporting the change; external factors related to the support the change gets from the government, Ministry of Education, or other agencies, and the model of implementation for the change. These factors should be viewed as sets of factors that are interrelated and therefore work together rather than taken in isolation from each other. The factors, in fact, form a system of variables that interact to determine the success or failure of any innovation’s implementation. Figure 2 attempts to show how these factors working together might determine whether an implementation becomes thorough, superficial, partial, or even non-existent.

Characteristics of the Change or Innovation

The characteristics of the change, its size, complexity, prescriptiveness, and practicality for teachers have to be considered in the light of the teachers' response, most often in hindsight (Fullan, 1991). Many studies have discovered that implementation is more effective when specific needs are identified. Not only is it important to know whether a given need is significant, but also how important it is relative to other needs. For example, in many developing countries most radical changes are not radical enough for the need (Havelock & Huberman, 1978), therefore prioritizing among sets of desirables is not easy, but necessary. Another factor is that of clarity. The Concerns-Based Adoption Model's (CBAM) work has addressed this issue by showing that an
Figure 2. Interactive factors affecting implementation, adapted from Fullan's interactive factors affecting implementation. From *The New Meaning of Educational Change* (p. 68), by M. G. Fullan, 1991, New York, Teacher's College Press, Copyright 1991 by Teachers College, Columbia University.
innovation can have various forms (innovation configuration) that teachers adopt.

"Innovations are almost always altered by individual teachers to fit the conditions and needs of their students and classrooms" (Hord et al., 1987, p. 18). Even where there is agreement that some change is needed and significant, the change has to be clear, at least to what it means in practice. Problems related to clarity have been found in virtually every study of significant change (Fink & Stoll, 1998; Hargreaves, 1997; Huberman & Miles, 1984). For example, some very simple and insignificant changes can be very clear while more difficult changes may not be amenable to easy clarification. However, complexity (the difficulty and extent of change required of the individuals responsible for implementation) can result in greater teacher change because more is being attempted (Fullan, 1991, 1993; Fullan & Hargreaves, 1992; Jenlink & Carr, 1996; Maouchehri & Goodman, 1998; Sergiovanni & Starrah, 1998).

Associated with clarity is the quality and practicality of the program. Many ambitious innovations are politically driven (Fullan, 1991; Hall et al., 2001; Havelock & Huberman, 1978). The norm in such innovations is to make decisions without the follow-up. When preparation time is made much longer than implementation period, the assumption is that adoption is more important than implementation. This in itself can become a problem because unexpected problems arise with which the people involved in the program have little or no prior experience.

Factors Related to Teachers Themselves

Other factors that affect implementation are related to teachers' experience and personal theories. A consistent finding from the literature is that teachers' experiences and personal theories have the greatest influence on how teachers value and implement
programs. The more experience that the teachers have teaching with traditional approaches, the more they question the value and relevance of new programs (Fullan, 1991, 1993; Goodman & Maouchehri, 1998; Hord et al., 2001; Jones et al., 1999).

Traditional teachers are often concerned about covering curriculum content requirements suggested in traditional textbooks. In essence, constructivist programs are an affront to their theories about strategies, methods, and materials they have used, and sometimes developed, successfully for many years. The important point to be made here is that teachers' chances of implementing a program increase if they believe in it (Hord et al., 2001).

Local Characteristics

In addition to the characteristics of the change itself and the experience and personal theories of teachers, certain conditions ought to be present in the school to have a successful implementation. In the school, there ought to be innovation advocates, whether they are teachers or the principal. On-site advocates act as sources of knowledge about the program and help reduce uncertainty of implementation for others. The principal has to be supportive, either as an instructional leader (Fullan, 1993; Wideen, 1992) or as a leader of leaders (Glickman & Bey, 1990, pp. 7-8; Pratt, 1994) who mobilizes the expertise, talent, and care of others. According to this school of thought this is the person who symbolizes, supports, distributes, and coordinates the work of teachers as instructional leaders. Furthermore, the teachers themselves must have true collaborative working cultures where they regard themselves as a working community that shares common goals, purposes, and visions (Glatthorn, 1994; Hargreaves et al., 1998; Sarason, 1996). The achievement of this condition takes time rather than
mandates.

**External Factors**

Irrespective of whether an innovation is introduced in a centralized or decentralized system, support from the district office, local education authority, or national ministry is needed. This support must be more than formal or legal: it must be active, where leaders show and demonstrate genuine interest. In most developing countries, leaders are expected to show interest by appearing in public to advocate the innovation, attend demonstrations and visit classrooms, and use their influence with the media to spread the message to citizens (Fullan, 1991, 1993; Fullan & Hargreaves, 1992; Havelock & Huberman, 1978; Williams et al., 1997).

**Models of Implementation**

Models of implementation differ in three major aspects: There are models that assume that the written innovation cannot be improved, and therefore should be implemented in exactly the way developers planned it (top-down Fidelity). Then there are models such as the Mutual Accomplishment (MA) model where the work of change initiators is respected while recognizing a continuing need in the classroom. Finally there are models such as the curricular Anarchy that assumes that teachers are curriculum experts and each classroom is an isolated and self-contained unit in which district-wide curriculum goals are irrelevant. The adoption of any one of these models affects implementation in a specific way. A full discussion of models is presented in chapter 2. Although the factors mentioned in earlier sections would affect the implementation irrespective of the model of implementation, there is an assumption that the fidelity model has inherent problems that in many cases become more visible during
implementation. This is because in this model teachers are expected to use a developed program exactly as an innovation developer envisioned it. The opposite is the case in the mutual accomplishment (MA) model where the work of the change initiators is respected while recognizing a continuing need for teachers to adapt the materials according to the children's needs in the classroom.

**Significance of the Study**

The present study makes a significant contribution in that, first, it was able to determine whether teachers report CA is being thoroughly, superficially, or partially implemented or not. Second, there is a need to make summative evaluations at this point because CA has reached the seventh grade. Such evaluations should say to what extent the goals and objectives of CA have been realized. This can only be said if it is known that CA is being implemented the way it was designed. It is important to know whether or not CA's implementation corresponds to the initial vision and to assess the progress of CA in relation to its objectives at each step of the implementation.

Finally, the results of this study may be useful to help the Ministry of Education make decisions that will improve the quality of primary education in Swaziland. This study will also contribute to what Havelock and Huberman (1978) have termed as woefully lacking research literature in the field of educational innovation in developing countries. The specific situation within a particular country in depth will contribute to much-needed knowledge on not only how to innovate, but also what to innovate.

**Definition of Terms**

*Implementation:* Change in practice after some change has been initiated (adopted), or consists of the process of putting into practice an idea, program, or set of
activities and structures new to the people attempting or expected to change.

**Innovation:** A deliberate, novel, specific change that is thought to be more efficacious in accomplishing the goal of a system.

**Lab school:** Schools used to test all instructional materials of the CAP before the pilot schools try them out.

**Pilot school:** Schools used to try out all instructional materials before they are used at national level.

**Primary school:** Schools with Grades 1 through 7.

**Secondary school:** Schools with Grades 8 through 12.

**Delimitations and Limitations**

This study used data collected from the survey questionnaire from selected teachers across Swaziland. No parents, students, or administrators were included in the sample. The study also employed a cross-sectional method of data collection at one single point in time. This does not take care of attitude change, which sometimes happens in trend studies or panel studies. In interpreting the results of this study, it must be remembered that the instrument measured teachers’ perceptions and beliefs, not unbiased observations of actual classroom behavior.

**Organization of the Study**

There are five chapters in this study. Chapter 1 deals with the following areas: background information, statement of the problem, the purpose of the study, major research questions and their hypotheses, the conceptual framework, significance of the study, definition of terms, delimitations, limitations, and the organization of the study.

Chapter 2 presents the review of related literature. Chapter 3 outlines the type of
research, the population, the method of gathering data, and the questionnaire. Chapter 4 presents the analysis of data. Chapter 5 concludes the study by summarizing findings. Recommendations for further research are also presented.
CHAPTER II

REVIEW OF THE LITERATURE

Introduction

This review is broken down into seven sections progressing from global to specific. First, the concept of educational change is examined, leading to a section that examines the historical development of educational change. The third section explains the concept of implementation as it will be applied in this study and reviews studies involving the implementation problem. This leads to a review in the fourth section of factors that affect implementation. The fifth section of the literature review presents studies on the impact of testing programs on teachers and students. The sixth section of this chapter discusses challenges when attempting innovation in developing countries. The last section reviews models of implementation. This is followed by a summary of the chapter.

Educational Change

Change is a constant for educational systems. As every society's frontline institutions for social coherence, cultural continuity, and economic progress, schools must always cope simultaneously with provocations to change and conservative forces to preserve tradition (Darling-Hammond, 1998). The challenge is in creating school systems that can balance these forces and continually respond to their students and
society's ever-evolving needs. Educators have always had to and will always engage with educational change of one sort or another simply because there are many domains of educational change. For example, changes can arise from shifts in educational goals. Some changes arise from increasing diversity of populations which schools are expected to serve. There are in many countries, today, emerging political perspectives on inclusiveness and major demographic shifts from urbanization to expanding global immigration patterns. Other changes arise from new conceptions in learning and knowledge building. In some countries, the fear of being left behind can cause pressure on education systems to change.

What has been said so far implies that change may be externally imposed or voluntarily sought. While there is a difference between voluntary and imposed change, all real change involves loss, anxiety, and struggle. According to Marris (1975),

> Whether the change is sought or resisted, and happens by chance or design; whether we look at it from the standpoint of reformers or those they manipulate, of individuals or institutions, the response is characteristically ambivalent. New experiences are always initially reacted to in the context of some familiar reliable construction of reality. (p. 7)

Marris does not see the conservative impulse as incompatible with growth; rather it seeks to consolidate skills and attachments whose secure possession provides the assurance to master something new. Others (Fullan, 1993; Hargreaves, 1994) have argued and rightly so that for change to be successful, it must accommodate the vision of the existing scheme.

Research has pointed out that change for the sake of change will not help. New programs either make no difference, help improve the situation, or make it worse. The difference between change and progress can be most forcefully brought home if a
question is asked: What if an innovation introduced in a country actually made matters worse, however unintentionally, than if nothing had been done? Change therefore must be understood not to always imply progress (Fullan, 1991; Fullan & Hargreaves, 1992; Miles, 1964; Sarason, 1972, 1996).

A Historical Overview

Studies of educational change have moved through several phases. In the last three decades or so, educational changes were infrequent and episodic and they never really affected or even addressed the core of how teachers taught (Cuban, 1984). Since the 1960s, educational change has become a familiar part of the teachers' work, and has more directly addressed issues of what teachers teach and how they should teach it. Following the launch of Sputnik and the emergence of post-war egalitarian ideals, public education in the United States has been treated as a crucible of technological and economic advancement and a creator of greater social justice (Fullan, 1991; Hargreaves, 1997; Sarason, 1982). In the early 1960s a lot of money was being poured into large-scale national curriculum efforts. It was assumed that merely by spending a lot of money, something good was bound to happen. Indeed, the term implementation was not used then, not even contemplated as a problem (Hargreaves, 1997; Pratt, 1994; Sarason, 1996). It was in these times of educational expansion and optimism that educational change really began in earnest—as also did the study of it (Hargreaves et al., 1998).

By the late 1960s and early 1970s, researchers such as Mathew Miles, Per Dalin, Lou Smith, Neil Gross, Lawrence Stenhouse, and Seymour Sarason had begun to study the growing phenomenon of educational innovation. They showed how and why large-scale curriculum innovations rarely progressed beyond the phase of having their packages...
purchased or adopted to the point where they were implemented fully and faithfully, and could bring about real changes in classroom practice. Much disappointment was experienced when expectations turned out to be so far removed from the realities of implementation (Fullan, 1991). These studies of failed implementation of large-scale curriculum innovations led to educators’ concentration on the individual school as the center or focal point of educational changes’ effort. Thus, school-based curriculum development and school-based staff development initiatives proliferated in many places, instead of development being imposed from far away.

Another challenge that gave pressure to the study of educational change was the work of Coleman, Campbell, and Hobson (1966) who produced research that was generally interpreted as demonstrating that a student’s socioeconomic background determined success. According to this interpretation, schools merely confirmed or reconfirmed the relative advantage or disadvantage of each child. Schools did not make much difference to students. This raised the very large question: Do schools make a difference to students regardless of socioeconomic background (Fink & Stoll, 1998)? To try and answer this question, many innovations were introduced to identify characteristics of effective schools. These innovations have made a number of significant contributions to an understanding of what needs to be considered to bring about and implement change.

Research on what made teachers effective in the classroom also expanded to address what made schools effective or ineffective as a whole. Lists of effective schools’ characteristics were discovered. Ironically these lists were turned into a step-by-step process of planned or managed change that schools could follow. Studies of what works and what does not work across all the different change strategies have created a truly
powerful knowledge base about the process, practices, and consequences of educational change. Different studies have shown or revealed various factors that affect implementation. In order to understand these factors, a clear conception of implementation is needed.

“Implementation consists of the process of putting into practice an idea, program or set of activities and structures new to the people attempting or expected to change” (Fullan, 1991, p. 65). Ideally, the implementation of educational change involves change in practice. Change in practice can occur at many levels: the teacher, the school, and the school district. Innovation is multidimensional. For example if given changes in any program are to be implemented, there are at least three dimensions at stake: the possible use of new materials, the possible use of new teaching approaches, and the possible alteration of beliefs, such as pedagogical assumptions and theories underlying particular new policies or programs. All three aspects of change are necessary because together they represent the means of achieving a particular educational goal or set of goals.

It is clear that any individual teacher may implement none, one, two, or all three dimensions. For example, a teacher could use new curriculum materials or technologies without altering the teaching approach. Or a teacher could use the materials and alter some behaviors without coming to grips with the conception or beliefs underlying the change. An innovation that does not include change at all three levels is probably not a significant change at all. For example, the use of a textbook or materials without any alteration in teaching strategies is a minor change, at best an example of “the more things change, the more they remain the same” (Fullan, 1991; Sarason, 1998). As Charters and Jones (1973) observe, careful attention should be given to determine whether change in
practice has actually occurred to avoid the risk of appraising "non-events." The most visible aspect of change in an innovation might be a set of new materials and resources. Yet this alone may not represent deep change. Change in teaching approach or style in using new materials presents greater difficulty if new skills must be acquired and new ways of conducting instructional activities established. Changes in beliefs are even more difficult: they challenge the core values held by individuals regarding the purposes of education, and yet real change involves changes in conceptions and role behavior.

Hargreaves (1994) argues, for example, that systematic reform involves building new conceptions about instruction and new forms of professionalism for teachers. This focus on less tangible and ultimately more influential aspects of schools such as school culture has been described as re-culturing. According to recent research, re-culturing is the process of developing new values, beliefs, and norms (Fullan, 1991; Hargreaves et al., 1998). Increasingly, academics and practitioners are looking at these non-structural aspects of schooling as doors to educational change (Joyce, Wolf, & Calhoun, 1993). Schein (1988) notes various interpretations of forms of culture. Among these interpretations are observed behavioral regularities, including language and rituals; norms that evolve in working groups; dominant values espoused by an organization; the philosophy that guides an organization's policy; and the feeling as climate conveyed in an organization. Deal and Kennedy (1983) view organizational culture more simply as "the way we do things around here." Schools, which re-culture successfully, develop educational meaning. This is more than a commitment to specific goals; it is the shared sense that staff members "know where they are going" and are present throughout the school year. Recent research is conclusive that cultures that simultaneously promote
collegiality and individuality (Fullan, 1991; Hargreaves, 1994; Sarason, 1996) are more likely to find innovative solutions to complex and unpredictable circumstances. Not only must the school’s culture promote group learning to enhance the knowledge and skills of teachers, but it must also honor the individual, ‘the maverick,’ because creativity and novelty were required to deal with an unknowable future and to prevent ‘group thinking’.

**Studies Investigating the Implementation Problem**

It has already been mentioned that the implementation of educational change involves “change in practice.” The implementation problem was discovered in the early 1970s as policy analysts took a look at the school level consequences of the great society’s sweeping educational reforms. To the surprise of the initiators of educational programs, “implementers” did not always do as told. The implementer’s responses are described as “quite idiosyncratic, frustratingly unpredictable, if not downright resistant” (McLaughlin, 1998).

**The Rand Change Agent Study**

From 1973 through 1978, the Rand Corporation carried out a national study of four federally funded “change agent” programs and policies intended to introduce and support innovative practices in public schools. The projects included in the change agent study were the products of federal policies conceived in the 1960s. Policy makers formulating these initiatives assumed a relatively direct relationship between federal policy “inputs,” local responses, and program outputs. It was generally believed that more money or better ideas enhanced inputs, implying that this would enable local educators to improve school practice.

The Rand Change Agent study combined quantitative survey methods with
qualitative fieldwork strategies. The study asked questions of how and why as well as looked at what local implementers did with federal program funds and frameworks. Field research work was key to Rand’s attempt to unpack the implementation perspective. There are many findings of the Rand Agent Change study; however, this study cites only the findings that are most revealing and fundamental to this investigation.

The Rand Change Agent study found that adoption of a project consistent with federal goals did not ensure successful implementation. Further that even where there seemed to be an initial successful implementation, this alone did not predict long-term continuation of projects initiated with federal funds once these funds were withdrawn. The Rand Change Agent study concluded that the net return to the general investment was the adoption of many innovations, the successful implementation of few, and the long-run continuation of still fewer (McLaughlin, 1998).

Another important finding was that it is exceedingly difficult for policy to change practice. In other words policy cannot mandate what matters. The Rand study demonstrated that the nature, amount, and pace of change at the local level was a product of local factors that were largely beyond the control of higher-level policy makers. Change ultimately is a problem of the smallest unit. What actually happens as a result of a policy depends on how policy is interpreted and transformed at each point in the process, and finally on the response of the individual at the end of the line. What matters most to policy outcomes are local capacity and will. The presence of the will or motivation to embrace policy objectives or strategies is essential to generate the effort and energy necessary to a successful project. However, local capacity and will are not only beyond the reach of policy, they can also change over time. For example, the Rand
Change Agent study described how local events such as teachers' strikes, which also happen in Swaziland, can negatively affect both capacity and will. Even while teachers in a site may be eager to embrace a change effort, they may elect not to do so because their institutional setting is not supportive. Briefly, it became clear that the local expertise, organizational routines, and resources available to support planned change efforts generate fundamental differences in the ability of practitioners to plan, execute, and sustain an innovative effort.

The Rand Change Agent study is very emphatic on the finding that adaptation replaced adoption. An elementary math course, for example, offered in a wealthy suburban classroom differs substantially from a course offered under the same title in an inner-city school. Traditionally, variability has been cast as the plague of efforts to school reform because it signaled uneven local responses to new programs. Also, variability has been interpreted as a warning of trouble in the system. The Rand Change Agent study raised the possibility that mutual adaptation and local variability may be good in that it shapes and integrates policy in ways best suited to local resources, traditions, and clientele.

The Rand Change Agent study is a seminal study of implementation and it framed a major challenge for analysis: linking macro and micro levels of policy, analysis, and action. McLaughlin (1998) observes that

macroanalysis and policies operate at the level of the system, and stress regularities of process and organizational structures as stable outlines of the policy process. Microanalysis, policies and perspectives, conversely operate at the individual level and interpret organizational action as problematic and unpredictable outcomes of "street level bureaucrats" as autonomous individuals. (p. 73)

The Rand Change Agent Study elaborated the macro–perspective on implementation and

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practice, but provided little insight on the central question: What are the factors that affect teachers' responses to policies aimed at changing classroom practices?

The Context Center Research Project

The context center research project of 1987 came as a reaction to one of the lessons learned from the Rand Change Agent study. The lesson was that research aimed at understanding how teachers' perspectives on teaching and learning are rooted in fundamentally different premises of action, if not different goals than those of the outside policy maker. The understandings about contexts that matter for teaching and learning and factors that shape teachers' beliefs about practice and attitudes about their students provide useful insights on the implementation problem. One of these insights is that many governance reforms can result in significantly changed teaching and learning only if teachers have opportunity to talk together, learn together, reflect together, examine student work together, and by so doing create strong learning communities. Standards-based reforms which aim to foster classrooms where every student learns challenging content must be supported by a site-level teacher community where practices and expectations can be developed that enable every student to have access to high-quality instruction. In order for students to experience coherence of the type envisioned by reformers, teachers in their school setting must subscribe to a shared technical culture. Traditional norms and scripts for action cannot be unlearned in isolation. Teachers cannot undertake alone the type of new learning and change in beliefs and practices reformers assume (Fullan, 1991; Jenkins & Amsler, 1993; Miles, 1998; Sarason, 1996). Sustained learning and deep individual change are extraordinarily difficult if pursued alone or in weak professional communities. The link between macro-level and micro-
level practices sits, for better or worse, in teachers’ professional communities (Hargreaves et al., 1998).

**Studies Involving the Principal’s Role in Changing the Culture of the School**

Many studies (Fullan & Hargreaves, 1992; Gooden, 2000; Guskey & Huberman, 1995; Hord et al., 1987; Leithwood & Montgomery, 1982; Miles, 1998; Sarason, 1992) have found that the amount of change is clearly related to school culture and climate. In a study involving almost 300 school districts, Berman and McLaughlin (1977) found that projects having the active support of the principal were most likely to fare well. They claim that the principal’s action carries the message as to whether a change is to be taken seriously or not. Hall et al. (1975) state that the degree of implementation of the innovation is different in different schools because of the concerns and actions of the principal. Hord et al. (1987) categorize principals according to their styles of leadership as change facilitators: principal as change initiator, manager, or responder. Hord et al. (1987) found that the most successful schools in implementing change were those schools where principals were defined as change initiators, followed by manager-led schools. The least successful were responder-led schools. Over the last decade research has progressed from examining the principal’s role in implementing specific innovations to his changing role in changing the culture of the school.

It is important to mention that principals vary widely in how they conceive their role. These variations are evident in the four different foci identified in research on principals’ styles or patterns of practice which comprise: an administration or plant manager focus; interpersonal relations as climate focus; a program focus; and a student
development focus. The majority of the principals' practice is in the first two as they primarily refer to maintenance of the school. The latter two correspond to instructional leadership and they are less common (Leithwood & Montgomery, 1982).

Gooden (2000) conducted a study in which she looked at two schools in which teachers implemented the primary program with a high fidelity to state-recommended practices. The 2 schools had been among the 24 schools that had previously been randomly selected for observations. Observers used an innovative component configuration map describing the patterns of primary-program implementation in classrooms. These patterns were divided into categories of high and low fidelity to recommend practices. At the 2 schools chosen by Gooden, the four teachers randomly selected for observations were all identified as high implementers of the program. Gooden conducted a naturalistic study in the 2 schools using a case-study design to determine the school conditions affecting implementation of the primary program.

Her summary is of great importance to this study. At both schools teachers shared common goals, purposes, and visions. However, the most important feature of the principal's role at each school was whether the primary-school teachers perceived that the principal's leadership met their needs. At one school, teachers were the experts in the classroom, expected support in instructional matters from other teachers, and expected the principal to respond to their needs with resources and moral support. On the other hand at the other school, the principal was expected to be a leader of instructional leaders. As such, the principal was expected to provide instructional advice to teachers, take an active part in the implementation process, and promote collaborative working relationships among teachers.
A second lesson from the study was that collaborative working relationships take time. This has to be born in mind as educators try to restructure and re-culture.

Between 1975 and 1988, at least 65 original empirical studies provided evidence for the claim that instructional leadership is an achievable expectation for principals (Leithwood & Montgomery, 1982). These studies, as a whole, also provided detailed descriptions of what such leadership looks like in practice. It is beyond the scope of this study to discuss the same. Despite such evidence, some researchers (Gersten et al., 1981) dispute the viability of an instructional leadership role for the principal, including teacher development, which is arguably the most central function of instructional leadership. In contrast to this argument, Kenneth Leithwood argues that even principals who acknowledge their responsibility to foster teacher development often claim that it is not a function they feel capable of performing well. He points out further that these feelings of inadequacy have two roots: an unclear image of what teacher development looks like, and uncertainty about just how a principal might help foster such development, given the usual job demands.

Another study, the *Development and Implementation of the School Improvement Plan*, represents many others (Fullan & Hargreaves, 1992; Miles & Huberman, 1994; Sarason, 1992) who have similar findings as reported here. In the development and implementation of the school improvement plan study reported by Fullan and Hargreaves (1992), the conceptual leadership of the principal stands out as one of the contributing factor to the success of its implementation. This is a longitudinal 4-year study that began in 1985 which reveals many important variables that interact for implementation. Both the parents and teachers describe the situation that existed prior to the fall of 1985 as
“something akin to a little shop of horrors.” This school is described as nearly dysfunctional (Fullan & Hargreaves, 1992, p. 125). The arrival of the new principal and staff at Oceanside School in the fall of 1985 saw the beginning of the innovation that is briefly described in this study. Two of the teachers had taught with the new principal in a nearby village school and came with the new principal to Oceanside. A common desire to interact with each other and to explore possible improvements in education linked the three. Only four of the original teachers had remained at Oceanside. The new mix of teachers now seemed to include a significant number who were interested in discussing teaching approaches and philosophies, in developing common units, and in comparing notes with one another. This became an important factor in shaping a new ethos that would develop in the school.

At the opening of the school, the principal called a meeting in which a discussion of school goals led to a needs assessment. The staff was concerned about language development. The series of in-service workshops that resulted from this workshop are shown in Figure 3.

It became apparent from preparing this flow chart of events that changes and interviews over the 4-year period that the school improvement project was not one innovation but many. Eventually the workshop involved students, parents and the community. An expert was invited partway through this innovation to make comments about the writing program, which was part of the language development project. The teachers and principal did not agree with her assessment in which she said she felt that the school was still at the initial stage of story writing, although significant strides had been made by the teachers to change from a basal reading program to the use of a guide.
innovative and exciting language arts program. Of significance in this visit of the expert was the capacity within the staff to deal with what they perceived as a criticism. Much reflection and discussion followed; the staff began to examine what needed doing in the light of one report on an informal rather than a formal basis. This incident became one more opportunity to grow professionally as a staff and to improve their teaching. The key to this growth appeared to be the capacity that had developed within the staff to deal with “dissonance created by the outside expert.”

By the 4th year of this project, many things had changed. The teachers describe the 4th year as a year of implementing at the classroom level those ideas that had emerged over the last 3 years. Old practices began to die out. As a result of this innovation, a school once considered nearly dysfunctional in terms of teacher growth became a center in the community where teachers felt confident enough to display their program to the public at large. The innovation itself changed over time. The principal, by providing the general conceptual direction for the project and an atmosphere that allowed for trial and experimentation, set an expectation in the school. Within this setting a “loosely-coupled group atmosphere developed within the school where both teachers and principals came together to plan, discuss the innovation, assess their impact and simply talk” (Fullan & Hargreaves, 1992, p. 137).

To sum up the principal role as a contributing factor for success in this innovation Wideen says:

During interviews with teachers, the role of the principal was cited repeatedly as a key factor in bringing about and maintaining the change and as a factor in the teachers’ development. An analysis of the transcribed interviews indicated that the principal at Oceanside took certain actions which directly supported the development and Implementation of the change, but more importantly that his attitude toward professionalism and his particular vision...
of a better education for the children in the school appeared to be the foundation, which supported the change. (Fullan & Hargreaves, 1992, p. 139)

A study of primary-school effectiveness in Burundi documents a strong and significant relationship between the frequency of teacher supervision and student achievement: Student test scores rose as the number of times the school principal visited the classroom increased. Frequent teacher supervision improved the punctuality of teachers and their adherence to the curriculum, which in turn produced higher test scores. The study also argued that principals suffer isolation and lack of communication just as teachers do. To play an effective role in school improvement, principals need regular mechanisms for communicating their questions and concerns to supervisors. In many developing countries, principals are selected from among teachers on the basis of their seniority and then trained, although systematic training is limited. Training before the appointment is virtually nonexistent, except when a teacher has served as a deputy or assistant principal. Studies in Egypt, Indonesia, and Paraguay have found that a principal's teaching experience and training are related to higher student achievement (Lockheed & Verspoor, 1991). However only a handful of countries, including China, Ethiopia, Kenya, Malaysia, Papua, New Guinea, the Philippines, and Thailand, have addressed the need to establish institutions to train principals. In developing countries principals perform multifaceted and complex tasks. They maintain relations among the school, community, and parents, supervise teachers, oversee the maintenance of facilities and equipment, manage a range of reporting and record-keeping duties, and, in small schools, teach as well. Yet they perform all these tasks under the chronic shortage of materials, clerical support, operating funds, and resources for staff development. It is no
wonder that under such conditions change in practice (implementation) becomes a struggle. The studies that have been reviewed up to this point suggest factors that affect implementation.

Factors That Affect Implementation

The Characteristics of the Innovation

Oftentimes the process in which teachers engage overshadow the nature of changes they attempt to make. The characteristics of the change, its size, complexity, prescriptiveness, and practicality for teachers should be considered in the light of the teachers' response (Pratt, 1994). Wideen (1992) observed that at "Oceanside" the very change being attempted there became influential in determining its success. While the teachers did appear to have a shared set of meanings and a common language with which to talk about the change in the school, its complexity seemed to provide something for everyone in terms of professional development. What existed was a general concept of a change, but one that carried specific meaning for different people. Some saw it as a changed language arts program, where they could use improved teaching techniques. A significant number of people on the staff, who exercised leadership at different stages, and who represented a united mass, viewed the innovation as an opportunity for growth for both themselves and for the students they were teaching. The complexity of the innovation became one of its strengths.

Although simple changes may be easier to carry out and clearer in terms of goals and objectives, they may not make such a difference and are not perceived to be worth the effort. While complex changes may present problems for implementation, they may result in greater change. Others argue that this may not be the case for developing
countries. Havelock and Huberman (1978) found that the many innovations in developing countries, despite the large-scale investments and expectations, do not appear to make a major "dent" at the national level in education or in the problem that they were designed to solve.

Perhaps this is another dilemma in the change process. On the one hand, there is evidence to suggest that the larger scope and personal demanding of change, the greater the chance of success. On the other hand, attempting too much can result in massive failure (Huberman & Miles, 1984; Sarason, 1990).

Supported Implementation

Because of the implementation failure of the 1960s many individuals involved in innovations began to focus not only on the quality of the innovation, but also on the quality of the use of an innovation. There was need to support the user's development of coherence and meaning. Implementation was an extended process, not a bounded event like the decision to adopt. Fidelity was naturally replaced by adaptation, "teacher proofness" as an ideal was out, and assistance to the struggling user was in—hence supported implementation (Miles, 1998).

From countless studies and interviews conducted by Havelock and Huberman (1978) while they were engaged in studying the process of educational change in developing countries, it was concluded that innovations must receive support from leaders in order to survive. If the project is national in scope there must be leadership support at the highest level, preferably the President or Prime Minister. The support must be more than formal or legal. The leaders must show interest by appearing in public to advocate the innovation; by attending demonstrations and visiting classrooms and
particularly by using their great influence with the media to ensure the message is spread to all citizens (Havelock & Huberman, 1978). Similarly, in Wideen’s (1992) study already discussed in the earlier sections, support of the district gave the principal and the teachers the enthusiasm to forge ahead. If the district appears to be nurturing and supportive, this seems to point out that there is commitment to an innovation at the district level. Many others (Fullan, 1993; Glatthorn, 1994; Hall et al., 2001) have supported this idea.

Another factor revealed so far is that of support from colleagues. Peer interaction has also been seen as a major factor in promoting change. Informal talk among teachers can provide a forum to test ideas and receive feedback. Little (1986) has identified the importance of collegiality in implementing innovations. Providing ways that the school staff can become more collaborative about their work may encourage commitment to a new idea. Except in very special circumstances, it is difficult to see much change occurring outside collaborative efforts or outside the reference to some group. A caveat must be placed in this statement. Hargreaves and Dawe (1989) have warned against the concept of contrived collegiality, in which bureaucratically driven systems attempt to create collegiality through imposed practices such as peer coaching. While such programs may be a starting point, in and of themselves, they are not sufficient. Collegiality takes time to develop and must come from within the school. The sharing of views among teachers must occur in a natural and genuine way. It cannot be legislated (Fullan & Hargreaves, 1992; Glatthorn, 1994; Jenlink & Carr, 1996).

According to Miles (1964), assistance leads to mastery and mastery to commitment, therefore user commitment and strong assistance lead to practice mastery.
and stabilization of use. "Large-scale change bearing innovations lived or died by the amount and quality of assistance that their users received once the change process was under way" (Huberman & Miles, 1984, p. 273). School change is not just a matter of planning, nor of finding and installing good practices, but have organically led and managed process deeply influenced by the local context, with some predictable regularities and great man contingencies.

The support system should include what Miles (1964) has called training for group skills. This will include training of individuals' (principals and teachers) in-group skills, where group members discuss and reflect on their own behavior in the group. The key variable here seems to be a process analysis, the deceptively simple activity of talking about what is going on in a situation, rather than staying on the official task or content level. Process analysis is thus essentially shared self-analytic behavior including awareness, communication, and usually evaluation, a sort of sustained mindfulness that leads to further diagnosis and action taking.

Process analysis reduces anxiety, increases congruence and improved communication, enhances interpersonal acceptance and enhances personal and group capacity of, for example self-esteem, improving coping, collaborative skill. Process analysis also is empowering in that it reduced status-based information gaps. Miles (1998) argues, "Knowledge is power, in effect" (p. 42). Thus, change strategies weak in process analysis are quite likely to fail. Green (1996) put it this way: "No matter how many times teachers see a strategy modeled or practice it themselves, they will not sustain the skill unless a support system is built into the workplace. Without such assistance the skill will not transfer from the training environment to the classroom or be
implemented for any significant length of time after training sessions” (p. 15). Green concludes that most educational innovations collapse because they lack a strong staff development process, which includes the support system.

Teacher Attitudes

Attitude change can be difficult to accomplish since teachers’ predispositions are often deeply entrenched (Fullan & Hargreaves, 1992; Glatthorn, 1994; Pratt, 1994; Sarason, 1995). However, the task can be accomplished under certain circumstances. If small teams of teachers work together according to grade level or department to develop units of the change, exchange ideas, identify and solve problems, and evaluate their input from time to time, teacher-to-teacher relationships are bound to improve. The administrators or national leaders and key colleagues should affirm the desired attitudes as being professionally desirable. Teachers should receive training and support the need to implement the change. This support should be a continued support rather than a “one time” provision. Change initiators should understand teachers’ concerns. Teachers need to be rewarded for changing attitudes and behaviors. According to Glatthorn (1994), four teacher attitudes seem essential for a successful implementation of an innovation: welcoming the change, believing in the change as a means of fostering student achievement, believing in one’s ability to implement the change, and achieve positive results with it and accepting that one is a professional whose skills and knowledge are respected, and can influence the development of the change. Teachers in both the study at Oceanside and Gooden’s two schools demonstrated a positive attitude toward their innovations. What stands out clearly is the fact that many factors are at play here to achieve positive teacher attitudes towards any given change.
The Impact of Testing on Teachers and Students

The North Carolina Experience

Jones et al.'s (1999) study, titled, “The Impact of High Stakes Testing on Teachers and Students in North Carolina,” set to find out how teachers viewed the new ABCs of Public Education, a major state reform that was implemented in 1996. The ABCs began with a legislative mandate for the state board of education to create a plan that would involve improving student performance, increase local flexibility, and promote economy and efficiency. The resulting plan called for school-based accountability with a focus on the basic subjects of reading, writing, and mathematics. The accountability component of the plan required that each school’s performance should be evaluated according to its own previous performance and statewide average test scores. Schools were labeled “exemplary,” “meets expectation,” or “low performance.” Among the high stakes associated with this plan are financial incentives of $1,500 bonuses for teachers if their schools exceed expectations.

The ABCs plan was initially implemented for Grades K through 8 in 1996, with high schools joining the plan by 1998. Soon after implementation there were reports from low-performing schools of principals being suspended, teachers being directed to spend more time on mathematics, reading, and writing in order to prepare students for national tests, and teachers feeling embarrassed by newspaper reports labeling their schools. To determine the impact of the ABCs program, Jones et al. (1999) conducted a study that involved 16 elementary schools in five school districts across North Carolina. A three-level random sampling process selected the schools.

Level one involved identifying school systems according to mountain, piedmont,
and coastal geographic areas. Within these regions a balance of rural, urban, and suburban was represented. Another level of stratification involved randomly selected schools by their designated performance on the 1997 end of grade tests (exemplary, meets expectations, adequate, or low performance). All certified teachers in each randomly selected elementary schools were given the opportunity to volunteer to complete the survey. A total of 470 teachers were contacted to participate in the survey, and 236 (52.2%) responded; 90% were female. Their average age was 40.6 years and they had a mean of 14.4 years of teaching experience. Eighty-nine percent were White, just over 10% were African American, and less than 1% were Hispanic. The results are outlined in five sections.

**Impact of Assessment on Instruction**

The results showed that teachers spent the majority of the school day preparing students in the basics as defined by the ABCs accountability plan that included reading, writing, and mathematics. This showed that assessment does indeed drive instruction, at least for the amount of time teachers devote to specific subjects. One of the typical effects of standardized testing is that such testing narrows the curriculum since teachers focus specifically on information that was tested. Teachers stopped being involved in hands-on instruction in science, for example, as the time to take the test grew closer. Some scholars have expressed concerns that, as a result of high-stakes testing, teachers could lose their own ability to be creative planners and thinkers.

**Practicing for the Tests**

Eighty percent of the teachers indicated that more than 20% of their total instructional time was spent practicing for the end of the grade tests. More than 28% of
the teachers indicated that students spent over 60% of the instructional time practicing for the tests. This was an increase from previous years. One method championed by principals and teachers is the use of practice tests. Students who spend a lot of time on “practice tests” get an “unfair” advantage if the test is not normed with a sample of students who used test-preparation materials to prepare for tests. The time that is taken away from regular instruction for both test preparation and actual testing seriously narrows the focus of the curriculum to just those concepts to be tested. Jones et al. (1999) ask the question: “Is our goal to prepare our students to be outstanding test takers or to become educated in a variety of skills and competencies?” (p. 201).

**Impact on Students**

Although 28% of the teachers indicated that they felt their students were more prepared for learning and 15% indicated that their students had more confidence, 61% felt that their students felt more anxiety, and 24% felt that their students were less confident. Strikingly, 48.5% of teachers indicated that the ABCs program had a negative impact on students’ “love of learning.” Jones et al. conclude that there is no question that many students undergo serious stress when asked to take part in high-stakes testing. Test–induced stress can evolve in a never-ending cycle for low performing students. Test anxiety is a common complaint and often results in lowered achievement, decreased social functioning, and lower feelings of self-worth (Capper, 1994; Jones, 1999).

**Impact on Instructional Strategies**

When asked if they had changed their teaching methods as a result of the ABCs program, 67% indicated that they had. However, the types of changes that teachers had made were less clear-cut. Most of them were trying to adapt their instructional practices...
to meet the new demands of end-of-grade testing. In some cases the changes may be positive; however, the large percentage that cited increased use of tests could signal a move toward less meaningful and lasting forms of pedagogy. Swaziland will need to learn those lessons before CA becomes “testing continuously” rather than continuous assessment.

**Teachers’ Beliefs About Accountability**

More than 77% of the teachers felt that the accountability program would not improve the quality of education in their schools. More than 76% felt that their jobs were more stressful than before the ABCs program was implemented. Many teachers felt that test scores were not a reflection of their teaching, but of students’ socioeconomic status. Jones et al. (1999) conclude that social class remains the single most important variable that predicts school achievement. Furthermore, teachers did not find external tests useful as they received little or no feedback from them. While NCC’s tests seem adequate as far as syllabus coverage is concerned, they would not be of much use as feedback if teachers regard these assessments as being imposed on them from outsiders (NCC staff).

In North Carolina’s ABCs plan, the intention is to give local schools more flexibility in making decisions that were formerly state-level decisions. However, the incredible result has been extreme state control. The state has taken over the curriculum. High-stake testing transfers control over the curriculum to the agency that sets the exam. Clearly, this innovation shows that some changes can create more problems than solutions. In the CAP of Swaziland, it would appear that the power to set exams has been transferred from the examination board to NCC. Whereas the board set one examination in 7 years, the NCC may set two exams per grade per year. One is left to wonder how
complex it is becoming to improve the quality of testing while at the same time give the teachers professional autonomy.

The Nigeria Experience

Similar to Swaziland's CAP, continuous assessment in Nigeria was introduced as a response to the 1977 National Policy in Education. In Nigeria's case, however, it was stated from the outset that government would look into the possibility of abolishing the primary-school learning certificate examination as soon as the processes for CA have been worked out and validated. It was also said that during the transition period, certification at the same level of education would be based on continuous assessment and the result of the primary-school learning certificate examination. To emphasize the role of CA, the national policy on education even gave out details of how this combination was worked out. The document stated that

as an interim measure the present system of a National Common Entrance Examination was allowed to continue until the Junior Secondary school system has taken off. The selection for entry into the secondary schools will, as soon as possible, be improved by incorporating headmasters Continuous assessment into the common entrance examination result. . . . Junior secondary school learning certificates will also be based on the continuous assessment method. (Ministry of Education, Science and Technology, 1985, p. 2)

What is impressive about Nigeria's CA is the conceptual level that had already been reached from the very beginning. It was argued by 1985 that although the single national examination was not the best way of evaluating students,

at present the single national examination provides some basis for comparing the quality of students' performances across schools. Under a continuous assessment situation, such comparison becomes extremely difficult. The difficulty arises from two main sources, namely: (a) differences in the quality of tests and other assessment instruments used in schools; and (b) differences in the procedures for scoring and grading the various assessment instruments in the various schools. (Ministry of Education, Science and Technology, 1985, p. 4)
Both the Nigeria Continuous Assessment system and the Swaziland CAP argue that for continuous assessment to be meaningful there has to be meticulous keeping of accurate records on each pupil. Second, since these rewards are expected to be cumulative from class to class and from school to school, there is need for uniformity in the kinds of records kept and the format for keeping such records. There is therefore the problem that the educational system must expect, in the case of Nigeria, several thousands, perhaps millions, of teachers to keep accurate records with a more or less uniform format. Third, a child even within the same level of education may move from one school to another. If, for example, the parents are transferred to another town, a mechanism must be evolved to ensure that the records of the child from one school can be transferred to another without removing those records from the first school.

The Swaziland Experience

One of the major components of the CAP in Swaziland is the providing of Criterion Referenced Tests (CRT). According to Capper (1994) and Pasigna (1996), who played very important roles in the CAP formation, CRTs are used to determine whether an individual has learned specific skills or knowledge. CRTs provide detailed descriptions of what the test is measuring, thereby giving clear information about what students know or do not know. Teachers who want to improve instruction, policy makers who want to know how to improve schools, head-teachers and inspectors who need to give teachers assistance, and developers of curricula and textbooks who need to determine whether the curriculum and textbooks are doing the intended job use the test results.

For many years the students in Swazi primary schools were assessed mainly (if
not only) by the Norm Referenced Tests (NRT). The intent in the NRT was to compare student performance on the test with that of a norm group of students rather than to determine how proficient a student is in a particular subject or skill. NRT are not able to indicate what students know or do not know, rather, how well one student performed in comparison with the norm group of students. The NRT gave very little information that could be used for improving schools. For this reason the CAP turned to CRT (Ministry of Education, 1995).

For the teachers in the CAP it is being emphasized that better tests mean better teaching, and better teaching means better learning. A well-designed testing system can spearhead educational improvement, but a poorly designed system can sabotage the most dedicated efforts to improve instructional quality. Examinations and national assessments convey powerful messages to teachers, parents, and students about what is important to learn and how it should be taught. Evidence has shown that teachers and students devoted great amounts of time to teaching and learning those topics they expect on tests (Capper, 1994; Jones et al., 1999; Ministry of Education, 1994a; Pasigna, 1996). How something is tested influences how it gets taught. Until examinations begin to examine critical thinking and deep-level understanding and learning, superficial learning will continue to be promoted. Facts, rules, and formulas are memorized in a non-coherent manner to “get through the book.” Superficial learning contributes to students’ lack of interest in school and, in turn, to higher rates of repetition and dropout.

Swaziland has not been alone in this. Capper (1994) points out that numerous studies have shown that much of the learning that occurs in classrooms around the world is superficial. Facts, rules and formulas are memorized, but bits and pieces of knowledge learned often are not connected into coherent framework that would allow students to make sense of them and
use them in new situations they may encounter. (p. 8)

Many primary-school teachers in Swaziland have the tendency to set tests that rely solely or primarily on factual knowledge because such items are easier to set and, second because they have not had adequate training on test formulation prior to the introduction of the CAP. One of the emphases of the CAP was to help teachers in writing items that assess various levels of understanding. The emphasis on CRT was not only the remembering aspect of what had been learned, but understanding and using knowledge were being emphasized as the essence of education. With this in mind, curriculum developers at NCC have been redesigning examinations to measure deep-level understanding, higher-order thinking, and the application of learning to real-life situations. They are doing this in the belief that these new CRTs will promote similar changes in classrooms.

With regard to CA, in 1995, 2 years after its nationwide implementation, the staff of the National Curriculum Center (NCC) and In-Service Teacher Education (INSET) department conducted a study, involving only first-grade and second-grade teachers. The purpose of this study was to monitor the implementation of the CA program. A stratified random sample of 60 schools throughout Swaziland was visited. The study compiled classroom observations and interviewed 180 teachers and 60 head-teachers. The findings were that most teachers did not teach towards clearly defined objectives. Some teachers had well-prepared lessons and others did not. There was active oral and written participation of pupils during the teaching-learning process, but fewer pupil-to-pupil interactions. Only a few teachers attempted to conduct remediation and enrichment activities with their pupils. Teachers did keep records, but they were often insufficient
and not properly kept. Since the training of teachers had focused more on teachers than head-teachers, some head-teachers were not able to supervise teachers properly (Magagula et al., 1995). Although the study did not make any conclusions, a long list of recommendations made. These stressed the importance of providing training for head-teachers in CA in schools. Head-teachers who had not been trained were trained in response to this report. In 1996, another study was conducted to determine whether teachers were doing remediation and enrichment in CA. This study involved only third-grade teachers. The response rate is not mentioned although it is said that 255 teachers responded (Reguhiild, 1998). The team of implementers reported that remediation and enrichment are happening in schools but also stated that they need to verify this by observations (Thwala et al., 1996, p. 43).

Reguhiild (1998), a doctoral student, conducted a qualitative study, using an ethnographic approach. He stayed in Swaziland for 7.5 weeks. During this time, he interviewed 4 head-teachers, 1 deputy head-teacher, 14 primary-school teachers, 1 CA leader, and a group (the number was not given) of retired teachers who had been hired, part-time, to work with CA staff. Observations were made during 19 teaching hours in 8 different classrooms. Reguhiild’s purpose was to find out the relationship between intentions and reality of the CA program and how CA can contribute to improvement of quality in primary education in Swaziland. He lists many problems including time for teacher preparations, receptivity of CA by Swaziland National Association of Teachers, (the teacher union, SNAT), teacher training colleges, and long distances to schools for material delivery.
The Challenge of Managing Innovations in Developing Countries

It is important to understand real-life situations in developing countries. Schooling in developing countries takes place under conditions that are very different from, say, industrial countries. In many developing countries that are low income, students are likely to attend a "shelter-less school," one that is poorly constructed and equipped. Their curriculum is likely to be poorly designed. Sometimes the teachers will have only 10 years of formal education. The learning environment typically has few resources, and classes consist of more than 50 children, some of whom may be chronically undernourished and hungry. The job of introducing worthwhile innovations in these countries is thus significantly more difficult than in developed countries.

Despite the lack of empirical evidence on school environment in developing countries, ethnographic studies and anecdotal evidence suggest that in many of these countries, the basic elements of an orderly school environment are frequently missing: Students and teachers are regularly absent, the stock of teaching material is limited, and physical surroundings are detrimental to learning (Lockheed et al., 1991). It would appear that even the learning that occurs is more haphazard rather than the result of a deliberate focus on the content and process of instruction. Schools often operate in isolation from parents and community.

Textbooks are the major, if not the only, definition of the curriculum; however, some of them fail to reinforce the development of higher-order thinking skills of problem solving and critical thinking. To make matters worse, some of the textbooks used suffer from factual inaccuracies, inappropriate illustrations, and problems of readability.

In Pakistan, for example textbooks contain a high proportion of factual and grammatical errors, significant deviations from the specifications set by the
curriculum Bureau of the Textbook Board, and language that differs sharply in difficulty from one grade level to another and from subject to subject among books at the same level. (Cope, Denning, & Reberro, 1989, p. 140)

Swaziland’s picture does not look that gloomy however. In 1993 an independent evaluator was hired to assess instructional materials produced by NCC in the period 1978 to 1983. This is an extract from his report:

The quality of the learning and teaching materials by the National Curriculum Center is no doubt acceptable. It contains appropriate illustrations and examples drawn from the child’s environment, and the designers have a good understanding of the general objectives of the education system as a whole. Further the materials are trial tested in schools with adequate opportunities for input and comments from both teachers and pupils. Finally, the level of the language used seems appropriate to the various stages of the pupil’s development. Teachers were generally satisfied with the quality of materials, although a few felt that some of the books, such as the Grade 7 English course, were a bit too demanding in terms of time allocation. (Swaitland, 1993, p. 16)

The Challenge of Large-Scale Innovations

In developing countries innovations are large scale and are meant to be applied uniformly. These large-scale programs usually respond to issues that central policymakers and planners consider priorities. However these priorities may not respond to issues that are priorities for administrators and parents at the school level. Thus the local commitment to national programs is often limited because the specific conditions of each school or district may mean that nationally defined strategies are not applicable locally.

Further lack of resources can create problems. Policymakers at the central level tend to emphasize the process of adopting the program, agreeing in principle to the reform; they may pay less attention to implementing the program locally, only to realize later that implementation requires significant funding for long-term support and local

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training. Many times resources for external assistance to schools are limited.

Finally, implementation of large-scale change requires that the issue of dissemination and of the relationship between the central authorities and implementers at the school and district level is explicitly addressed. Both direct and indirect strategies should be considered. Direct strategies use power or administrative action to bring about a desired goal. They often take the form of heavy-handed, official mandates that force schools to participate in the changes being introduced. Indirect strategies rely on incentives that persuade people that the program is valuable and should be adopted (Lockheed & Verspoor, 1991). As many have argued, the most successful implementation approach generally combines direct and indirect strategies by providing support to and exerting pressure on local authorities (Fullan & Hargreaves, 1992; Havelock & Huberman, 1978; Lockheed & Verspoor, 1991). In developing countries the innovations are not only large scale, they also appear to have a problematic pattern of implementation.

A Problematic Pattern of Implementation and Outcome of Innovative Projects

The innovation process in many developing countries appears to be that of a problematic pattern. To begin with, there is a strong desire, often after independence, for major change, which often takes the form of large-scale projects. The reasons are many: the urgency of economic self-sufficiency, which simultaneously entails massive changes in the school curriculum, political and economic pressures from within the geographical region, rapid changes in political leadership in some countries, the availability of funds (donor countries) and expertise from bilateral or multilateral sources on such a scale that radical changes can be conceived and introduced. Most of these projects seem not even
ambitious enough for the needs of the country, but they are often too ambitious for their capacity. Figure 5 presents a rudimentary schema of this pattern (Havelock & Huberman, 1978).

Havelock and Huberman (1978) argue that there is a clear relationship between the magnitude of the innovation and the procedural structures available for its implementation. In any innovation, whether that of an industrialized country or developing country, the needs are no less urgent, and the desire to create new programs to meet them is no less strong.

Rather the difference lies in the existence of a more stable, more highly differentiated infrastructure, the existence of minimal control mechanism for weighing the relative costs and benefit of a proposed innovation, so that the capacity of the institution to carry out the project is evaluated at the outset and also the likelihood of having some prior experience with the innovation.

Put succinctly, in highly industrialized countries, educators might be less likely to take on innovations, which they are not fairly certain of implementing successfully. They (industrialized countries) might be less likely to take major risks, as was mentioned in chapter 1.

In most of the developing countries there is, however, a choice to reduce the size and ambition of the project, but the option to go ahead and implement the innovation is usually taken, relying heavily on the energy and commitment of the educational and political leaders. In such cases, the innovation is carried out in response to a generally felt need, for example, of a massive shortage of trained teachers, high dropout rates, illiteracy, and unemployment of untrained youth in the cities. These projects run into
serious trouble after the initial phase of implementation.

At other times these innovations have no option but to depend on massive outside aid in forms of loans, grants, expertise, materials, and equipment. It is worth mentioning here that paradoxically the relative efficiency of smaller-scale or local innovations is often enhanced by constraints: the absence of consistent, high-level administrative support and the inadequacy of funds and materials leave innovators with "lowered" ambition to a more realistic level.

**Models of Implementation**

**A Simplified Overview of the Change Process**

Most researchers now see three broad phases to the change process: Phase I, variously labeled initiation, mobilization, or adoption, consists of the process that leads
up to and includes a decision to adopt or proceed with a change. Phase II, implementation of initial use, involves the first experiences of attempting to put an idea or reform into practice. Phase III, called continuation, incorporation routinization, or institutionalization, refers to whether the change or innovation gets built in as an ongoing part of the system or disappears by way of a decision to discard or through attrition.

Figure 5. A simplified overview of the change process. From: The New Meaning of Educational Change (p. 48), by M. G. Fullan, 1992, New York, Teacher's College Press, Copyright 1992 by Teachers College, Columbia University.

The concept of outcome is to provide a more complete overview. This study's concentration, for example, is on the second phase, implementation. As the two-way arrows imply, it is not a linear process but one in which events at one stage can feed back to other decisions made at the previous stage. For example, at the initiation stage, many innovation advocates may not be too concerned about the perceived clarity of the innovation or the specific meaning of an innovation. However, later, during the implementation stage, this factor becomes critical, especially when teachers are to implement it. An interesting finding by many researchers is that teachers as a group have less opportunity to come into contact with new ideas and less time and energy to follow through on those ideas they do become aware of. Ideas that get initiated need the support of teachers to go anywhere. More interesting is the finding that when a teacher or teachers initiate good ideas, other teachers would prefer that source (teacher source) than
others (Fullan, 1991, p. 54). It becomes increasingly clear that these findings have a lot to do with the implementation phase.

In the presented model the discussion on who initiates the change is left open. The single most important idea is that change is a process, not an event. Second, it is important to note that innovations get initiated from many different sources and for different reasons. Fullan (1991) lists factors associated to initiation, such as: existence and quality of innovations, access to innovations, advocacy from central administration, teacher advocacy, external change agents, community pressure, new policies, problem solving, and bureaucratic orientations. In some decentralized systems, schools tend voluntarily to adopt innovations that promote the school “self-image” as up-to-date, efficient, professional, or responsive. It is relatively easy for schools to adopt complex, vague, inefficient, and costly (especially if someone else is paying) innovations as long as they do not have to implement them.

Ideally, the best beginnings involve relevance, readiness, and resources. Relevance includes the interaction of need, clarity of the innovation, and utility of what it really has to offer to teachers and students. Readiness involves the school’s practical and conceptual capacity to initiate, develop, or adopt a given innovation. This means that questions of whether the innovation addresses a perceived need or whether the individuals involved possess the prerequisite knowledge and skills ought to be answered. The availability of facilities, equipment, materials, and supplies should be checked. Researchers have found out that poor beginnings can be turned into success depending on what is done during implementation. In some cases, promising startups can be squandered by what happens afterwards.
Another important factor which surfaces later from the initiation stage is the model of implementation accepted at the initiation state or that is taken for granted as the one always in place. Briefly stated, it matters a great deal whether the process is characterized more by a programmatic or fidelity emphasis or by a mutually adaptive or evolutionary mode (Berman, 1981), which is discussed in the next sections.

The Mutual Accomplishment Model of Implementation

In too many places a high-quality curriculum guide is written, presented to teachers, in a workshop, put on a shelf, and then never referred to again. To avoid such wasted effort, change initiators need to develop and carry out an effective implementation strategy. Glatthorn (1994) emphasizes the need to allocate more resources to implementation of any new materials or curriculum than the developing period. Implementation is a complex change that requires the efforts of all involved if it is to be successful.

The MA, a concept introduced by Bird (1986), describes a type of implementation in which developers of an innovation accomplish their central goal of changing the curriculum in a positive direction and users of the innovation accomplish their goals of influencing the specifics of the curriculum while retaining their autonomy over daily life in the classroom. MA respects the work of the change initiators or developers while recognizing a continuing need for improvement. MA also values district-wide coordination of central elements of the innovation while acknowledging that each classroom represents a unique context. Additionally, the model honors the professionalism of teachers, valuing their input and granting them the autonomy they need to adopt the innovation to the demands of the classroom. MA is a sensible midpoint
between top–down fidelity and curricular anarchy (Glatthorn, 1994).

Top-Down Fidelity

Top-down fidelity assumes that the written innovation, curriculum guide, or instructional materials cannot be improved. Top-down fidelity emphasizes that an innovation must be implemented in exactly the way the developers planned. Teachers in this model are deliverers of an externally produced product. In the 1960s innovations of all sorts, set theory, team teaching, trimester plans, were being advocated vigorously, installed, and sometimes evaluated. These innovations were developed because they were technically better than the “ineffective” “outmoded” “entrenched” present practice, and it was believed would lead to better practice. Thus technical rationality led to insistence on innovation quality, to fidelity of implementation, and ultimately to search for “teacher proof-ness” paralleling Herman Wouk’s dictum that the “Navy was designed by geniuses to be run by idiots” (Miles, 1993). “Top down fidelity is not only impossible to achieve, it also devalues the skills of teachers” (Glatthorn, 1994, p. 58).

Curricular Anarchy

Curricular anarchy, on the other hand, is a “Laissez-faire approach” that assumes that teachers are curriculum experts. Each classroom, according to this model of implementation, is an isolated and self-contained unit in which district–wide curriculum goals are irrelevant and the level of student achievement depends upon the ability of each classroom teacher. The result of this model is a “patchwork quilt curriculum” (Glatthorn, 1994, p. 58) which appears to be even worse than top–down fidelity (in my view).
The Infrastructure Authority Consensus (IAC) Model

**Infrastructure (I)**

The IAC model of implementation, suggested by Havelock and Huberman (1978), can be applied in both large-scale and small-scale innovations. A good infrastructure (I) implies that all four components, *correct definition of needs, correct analysis of the problem, appropriate solution, and rapid implementation*, are present in the innovation.

**Authority (A)**

In this model (A) refers to authority, power, and control. In some complex models, one would distinguish between the elements of authority, power, and control, but in this model they are grouped into one component, which gives energy and direction to the problem-solving cycle. High Authority (A+) in this model means that there are people, who may not always be the same, who are making sure that a need is recognized, the problem is treated, some solution is found, and there is follow-through in the course of implementation.

**Consensus (C)**

Consensus (C) means that people involved in a large-scale innovation (as administrators or as the public for whom the project is intended) agree with its objectives and with the way it is being carried out. In the studies of Havelock and Huberman (1978) the evidence indicated that it is very difficult to achieve consensus at the outset and, when achieved, it may not be easy to maintain it. Typically, one assumes consensus and implements. As a corollary it is difficult to have both a high degree of consensus (C+) and authority (A+).

One of the principal dangers in the management of innovation, in fact, lies in the
fact that one group of persons (administrators, political leaders, experts) determines the amount and intensity of change which another group (teachers, students, local administrative staff, etc.) is to undergo. People do not consent easily or for long to having the control of their affairs in the hands of someone else.

The IAC model would be incomplete without Resources (R). However, insufficient resources handicap many countries, particularly developing countries, and even those countries with high reserves of capital. For example, the Arab States and Latin American countries lack trained personnel and technical infrastructure.

**Combinations of the IAC Model**

How do combinations of the IAC model impact implementation? In this study there is an argument implied by the literature that what happens at the planning stage affects the later stages. For example, in the IAC model, the quest for major changes is likely to lead to successful implementation where there is good infrastructure for problem solving, high authority, and high consensus \((I + A + C +)\). This means that a project is likely to be well conceived and well executed. The absence of any of these \((I, A, \text{ or } C)\) creates some problems. For example, when there is a weak infrastructure \((I-, C, A)\) the entire problem-solving cycle becomes unreliable. With a more ambitious project the infrastructure tends to become weak, and there is a tendency to have a greater number of unpredictable things happening in the life of the project. This, in turn, reduces the probability that the final form of the innovation will resemble its original design. The weakness in the infrastructure can manifest itself at various points in the problem-solving cycle: (1) in the diagnosis of the need for change, where genuine needs are not sensed or are distorted by the time they reach the planning and decision-making units, (2) in the
definition of the problem, where the educational leadership has fixed ideas and tends not
to consult the evidence from the field, (3) in the solution proposed, which may be
inappropriate or impracticable, and (4) in the implementation phase, where the
performances of the people involved in the project, the administrative support, and
technical machinery are not reliable, and do not provide the needed elements in the form
needed.

In some innovations it is possible to have (I- C+ A+), an educational system with
(I-), and yet successfully implement a large-scale innovation. In such innovations,
numerous problems encountered in the implementation, many of which have resulted
from rapid planning and overambitious solutions, are overcome simply by the energies
and commitment of the people concerned. However, most of these innovations survive
just a little beyond the introductory phase.

Other innovations may have (I+ A- C-). These are innovations well documented
with the planning and administrative machinery functioning smoothly, but with a solution
that may be unacceptable on, say, political or social ground to most of the people
concerned, including those responsible for implementing the innovation. Typically, these
projects run into difficulty at the implementation stage where there is no demand for
follow-through (A-), open resistance (C-), and subtle deformation or sabotage. An
inefficient combination of the IAC model would be where the implementation is
unreliable, leadership erratic, and agreement on objectives low (I-, A-, C-). In this
configuration, the final form of the innovation will not resemble the original design and
little or no effort was made to fully implement the project as planned.
The Concerns-Based Adoption Model (CBAM)

One of the most common and serious mistakes made by both the administrators and leaders of a change process is to presume that once an innovation has been introduced and initial training has been completed, the intended users will put the innovation into practice. Another mistake is to assume that all users of the implementation will react in similar ways. The CBAM model provides insights and understandings about school change. The CBAM model is client-centered in that it identifies the special needs of individual users of an innovation and also enables the change facilitator (CF) to provide vital assistance through appropriate actions. This approach helps to maximize the prospects for successful school improvement projects while minimizing the innovation-related frustrations of individuals (Hord et al., 1987).

CBAM's components can be used as tools for introducing an innovation and monitoring its implementation. The first tool is the Innovation Configuration (IC), a tool that focuses on identifying and describing the various forms of an innovation that different teachers adopt. Innovations are almost always altered by individual teachers to fit the conditions and needs of their students and classrooms. An IC represents the different ways individual users implement an innovation. It is important for the facilitator to be able to identify the specific ways in which teachers put a program into operation. In order for this to happen, programs should not state ultimate goals only because goals alone cannot tell teachers how to implement the program in the classroom. It is critical to be able to talk about an educational program in clear, operational terms. To be truly helpful to teachers, one must describe a program in the way it will look in actual practice in the classroom. This concern is the one that led to the concept of IC.
With an IC checklist the facilitator can monitor program progress by individual teachers. The IC component checklist is a tool for summarizing the descriptions of identified component parts that are put to use.

The second tool in CBAM is named the "stages of concern" (SoC). When engaged in any change process, teachers will have specific and individualistic concerns about the change and their involvement in it. Concerns refer to the feelings, thoughts, and reactions individuals have about a new program or innovation that touches their lives. Concerns exert a powerful influence on the implementation of a change, and they determine the kinds of assistance that teachers find useful. Research has identified seven stages of concerns that users or potential users of an innovation may proceed through. These are named Awareness, Information, Personal, Management, Consequence, Collaboration, and Refocusing. They may further be grouped into three dimensions: self, task, and impact. Self-concerns refers to the early stages when teachers are likely to want to know when the program was given, the kind of preparation they will receive, the source of the new program, who is endorsing it, and why and how it is supposed to work (awareness, informational, and personal). Task concerns are likely to surface during the early period of use. This is the time teachers are asking questions about time to do all the different things the program requires (for example, remediation and enrichment in the CAP). When teachers' most intense concerns focus on the effects of an innovation on students and what can be done to improve the effectiveness of the program, they have reached the impact level (consequence, collaboration, and refocusing). Only a few teachers reach, for example, the stage of collaboration, where they are concerned about working with other teachers to improve the existing innovation. However, when they do,
their concerns are indicative of the stage of refocusing. Concerns can be assessed in many ways: face-to-face conversation, asking informal questions, using open-ended statements, and using survey questionnaires.

Concerns do not exist in a vacuum. Concerns are influenced by participants feelings about an innovation, by their perception of their ability to use it, by their setting in which the change occurs, by the number of other changes in which they are involved and most of all by the kind of support and assistance they receive as the attempt to implement change. (Hord et al., 1987, p. 43)

A third component and diagnostic tool of the CBAM is named “Levels of Use (LoU). Research has shown that there are teachers who do not use innovations at all, even months or years after the introduction. Others use only parts of an innovation, while still others try to use it, but struggle. Regrettably, initiators of innovations have the tendency to go ahead and assess the effectiveness of an innovation whether or not these innovations are actually used effectively. As a result, innovation after innovation judged this way has been discarded or de-emphasized because it did not produce the expected outcomes.

A prime responsibility of change facilitators is to guide the change process to a point of successful implementation (Hall et al., 2001; Hord et al., 1987). To accomplish this, the facilitator must monitor how an innovation is being used and act upon that information. The CBAM model suggests a proven technique of use. The LoU dimension describes the behaviors of the users of an innovation through various stages, from spending most efforts in orienting, to managing, and finally to integrating use of the innovation. LoU does not attempt to explain causality. Instead, the LoU dimension is an attempt to define operationally what the user is doing. Eight distinct levels of use have been identified: non-use, orientation, preparation, mechanical use, routine, refinement,
integration, and renewal.

As its name suggests, non-use refers to the state in which the teacher has little or no knowledge of the innovation, no involvement with it, and is doing nothing toward becoming involved. Orientation is the stage at which the individual takes action to learn more detailed information about the innovation. Preparation is the stage in which the user makes a decision to use the innovation by establishing a time to begin. Mechanical use refers to the stage in which the user's focus is on the short-term, day-to-day use of the innovation with little time for reflection. At this time an attempt is made to master required tasks, sometimes in a disjointed and superficial way. Routine is the stage in which the use of the innovation is stabilized but on a routine basis. Little preparation or thought is being given to improve innovation use or its consequences. Refinement is the stage in which the use of the innovation is changed according to formal or informal evaluation in order to increase the impact on students. Integration is the stage in which the user initiates changes in use of the innovation based on input from and in coordination with colleagues for the benefit of the students. The final stage, renewal, refers to a point in time when the user re-evaluates the quality of use of the innovation, seeks major modifications of, or alternatives to, examines new developments in the field, and explores new goals for self and the organization.

Finally it is important to mention that in the SoC and the LoU, the stages are not fixed. Not everyone will move through the LoU stages at the same pace and not everybody will have the same intensity of concern at the various stages. The nature of the change and the amount of assistance provided will affect the way in which individuals experience these stages. The CBAM model brings out insights and understandings of the
school change that should lead policymakers and change initiators to a better appreciation of the complexities of the very human process of change and of the demands that process imposes at every level of the system.

Summary

The literature has revealed that the focus on educational innovation came on the scene during the 1960s. This was the “adoption” era of reform because the goal, it would appear, was to flood the education systems with innovations. It can be argued that it was genuinely believed that the larger the innovations, the better it would be to bring about desired improvements. For example, the concern in the United States was that scientific accomplishments in the West were falling behind those in Russia and that a large-scale national strategy would soon correct the situation. In other countries such as those in the developing world, it was the fear of being left behind and gained political independence that brought about the desire to adopt large-scale innovations. Much disappointment was experienced when the large innovations did not bring about the desired changes. It was after such disappointments that the term Implementation—what was happening (or not) in practice—came into use. Many studies investigated the implementation problem and found that people were adopting innovations without asking why. Usage was assumed to be happening, but many researchers (Fullan, 1982, 1991; Hargreaves et al., 1998; Havelock & Huberman, 1978; Hord et al., 1987; Miles, 1998; Sarason, 1972, 1996) documented that little was changing in practice. Briefly stated, despite numerous adoptions of innovations, very little significant change had occurred at the school level corresponding to the intended consequences of these innovations.

Studies included in the literature (Fullan, 1991; Gooden, 2000; Hargreaves et al.,
1998; Jones et al., 1999; McLaughlin, 1998) revealed that there are many interactive factors that affect implementation. These factors include: the characteristics of the innovation itself, its size, complexity, prescriptiveness, and practicality for teachers; the attitude of the users of the change; the support the users receive from the initiators of the change; the teacher-to-teacher relationships within the school, the mastery level of the users for the change; the role the principal plays in creating a healthy climate in the school and a strong professional community; and, finally, the model of implementation adopted or assumed by the users. The factors, in fact, form a system of variables that interact and work together, rather than in isolation, to determine the success (or failure) of the implementation of any program. These findings guided the present study.
CHAPTER III

METHODOLOGY

Introduction

The purpose of the study was to investigate the extent to which the primary teachers in Swaziland are implementing the Continuous Assessment Program. This was attempted through an examination of how program implementation varies by the demographic and attitudinal characteristics of teachers. This was captured through chosen indicators: using well-stated objectives, giving Criterion Referenced Tests (CRT), providing remedial and enrichment activities, and keeping proper records. The study thus aimed at assessing the personal and institutional factors that are related to the implementation of the Continuous Assessment Program. This chapter presents the type of research, the description of population, instrumentation of measures, and research procedures. The chapter also describes the statistical tests that were used to address the two general research questions already listed in chapter 1 and the seven research hypotheses also listed in chapter 1.

Research Design

This study is quantitative, employing the self-report survey research method in which a questionnaire was administered to a sample of Grade 1 through 7 teachers. Surveys are used to learn about people's attitudes, beliefs, values, demographics,
behavior, opinions, habits, desires, and ideas (Gay & Airasian, 2000; McMillan & Schumacher, 2001). Most surveys describe the incidence, frequency, and distribution of the characteristics of an identified population. In addition to being descriptive, surveys can also be used to explore relationships between variables, or in explanatory ways. Survey research is very popular because of three primary reasons. First, surveys are versatile because they can be used to investigate almost any problem or question. Second, surveys are efficient: credible information can be collected at relatively low cost. This is especially true for written surveys that are mailed or otherwise distributed and collected. That is the data collection technique that this investigation used. Surveys are also efficient because data on many variables can be gathered without substantial increases in time or cost.

Third, and most important, surveys can use small samples selected from a larger population in ways that permit generalizations of the population. In fact, surveys are often the only means of being able to obtain a representative description of traits, beliefs, attitudes, and other characteristics of a population (McMillan & Schumacher, 2001; Wersma, 2000).

In this study, the survey used a proportionally stratified random sample from which the inferences were made about the population based on the behavior of those sampled. The design was cross-sectional involving the collection of data at one point in time.
Population and Sample

The target population in this study was all teachers of grades 1 through 7 in the primary schools in Swaziland. By definition this was the group of interest to which the results of the study were generalized.

Purposive Sampling for the Pilot Study

Table 1 shows the purposive sampling that was done for the pilot sample. In purposive sampling, also referred to as judgment sampling, the sample was selected based on the knowledge of the group to be sampled. For example, in the pilot study 30 women and 20 men were invited to belong to the sample because in Swaziland there are more females than males in the teaching force. In 1999, 76% of teachers were female whereas only 24% were male.

In this study purposive sampling was used in which I used experience and prior knowledge to identify criteria for selecting the sample. The sample for this pilot phase is described in Table 1. Eleven teachers were selected from each region according to the following criteria: 4 were first-grade teachers from each region, 2 were second-grade teachers from each region, 1 teacher was selected from the third-, fourth-, fifth-, sixth-, and seventh-grade teachers in each region. From 16 nations’ Continuous Assessment pilot schools, 4 teachers were invited. At least one of these would be teaching fourth-, fifth-, sixth-, or seventh grades. The other two teachers were from each of the two Laboratory (Lab) schools of the Continuous Assessment Program.
Table 1

Demographics of Pilot Study Sample

<table>
<thead>
<tr>
<th>District</th>
<th>Number of Teachers</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hhohho</td>
<td>11</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lubombo</td>
<td>11</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Manzini</td>
<td>11</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Shiselweni</td>
<td>11</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pilot schools</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lab schools</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td><strong>16</strong></td>
<td><strong>8</strong></td>
<td><strong>4</strong></td>
<td><strong>5</strong></td>
<td><strong>5</strong></td>
<td><strong>6</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

A common attribute for all the teachers in the sample was that they were within reachable distance by car. The NCC contact persons, using the criterion that was given to them by the researcher, identified the teachers for the pilot study.

The justification for having more teachers from the first grade was that, at the time of the piloting, the first-grade teachers would have been using instructional materials that had been undergoing revisions for at least 8 years. However, the sixth- or seventh-
grade teachers would have been using the materials for only 1 to 2 years (this is because the Continuous Assessment Program was being implemented at the rate of one grade per year), and hence the fewer number of teachers from those grades. It was also regarded important to select some teachers from both the pilot schools and the Lab Schools since these schools would have been exposed to more CA materials than others.

The Need for Piloting

Piloting or pre-testing the questionnaire provided information about deficiencies and suggestions for further development. These included a critique of the survey directions, recording procedures, total time taken to respond to all items, and feedback on specific survey items. Thus, the main purpose of pre-testing the instrument was to check for ambiguity, confusion, and poorly prepared items.

The Sample for the Main Study

For the main study, a proportionally stratified random sample was drawn from the 538 primary schools of Swaziland. This was determined to be 54 schools in total (at least 10% of the total population). All the teachers of first grade through seventh grade in the 54 schools belonged to the sample. Stratification was based on all four districts of the country. Since random sampling is the process of selecting a sample in such a way that all individuals in the defined population have an equal and independent chance of being selected, the implication is that every primary-school teacher in the country had the same probability of being selected. Selection of one school therefore did not affect the selection of another. Although no technique, not even random sampling, guarantees a representative sample, the probability of having a representative sample is higher for
random sampling than in any other procedure (Gay, 1996). The total number of teachers sampled was 600.

The sample for the main study was 10% of the total population as illustrated in Figure 5. For Hhohho district, 14 schools were selected. For Lubombo, 12 schools were selected. For Manzini district, 15 schools were selected. For Shiselweni district, 13 schools were selected. The total number of schools was therefore 54.

![Diagram of stratified random sample]

Figure 6. The stratified random sample for the study.

**Independent and Dependent Variables**

The study has one dependent variable, the degree to which the Continuous Assessment Program is being implemented. The degree of implementation was determined by examining responses to each of the five indicators (also known as the five major components of the Continuous Assessment Program) for implementation: using well-stated objectives, giving Criterion Referenced Testing (CRT), conducting remedial activities, providing enrichment activities, and keeping of proper records. A cluster of statements in the questionnaire measured each of these variables.

This study's independent variables have been carefully considered from the literature and combined with those factors that are unique to Swaziland. These are:
educational attainment of teachers, work experience in Continuous Assessment (CA),
teacher's attitude toward the Continuous Assessment Program, perceived support of
Ministry of Education, perceived adequacy of initial and ongoing training of teachers,
and perceived role of head teacher in the CAP. Figure 7 is an attempt to show how these
factors might impact implementation.

Educational Attainment

Based on what Havelock and Huberman (1978) observed concerning innovations
in developing countries, teachers with higher qualifications are expected to understand
the CA concepts better than their counterparts with "lower" qualifications. This implies
that there would be a positive relationship between educational attainment and
implementation. However, in Swaziland, teachers with higher qualifications appear to be
less likely to accept innovations, which they are not fairly certain of implementing
successfully. The relationship between educational attainment and implementation was
purely exploratory.

Work Experience in CA

It is expected that those teachers who have more experience in CA will
understand the Continuous Assessment Program better and therefore have a higher
degree of implementation than those with fewer years of experience. Hall and Hord
(2001) found that teachers who had been in the field longer (22 to 38 years) most agreed
that they had support for educational change. Those who had been in education the least
amount of time (1 through 9 years) differed significantly from those who had spent the
greatest number of years in education. The ones who had the least amount of years in work experience said they had the least amount of support for change.

Teachers’ Attitude Toward CA

Literature (Fink & Stoll, 1998; Fullan, 1991; Hall et al., 2001; Hargreaves, 1994) reviewed was in agreement that attitude change can be difficult to accomplish since teachers’ predispositions are often entrenched, but the task is not impossible if the teachers welcome the change as a stimulus for their growth. If teachers believe in the change, believe in their ability to implement it, and see themselves as professionals whose skills and knowledge are respected, then they are bound to have a positive attitude towards the change (Hall et al., 2001; Hargreaves et al., 1998; Miles, 1998).

Perceived Ministry of Education (MoE) Support

Research has pointed to the fact that central office personnel should clearly make their strong support for an innovation in speaking, writing, and actions. Instructional materials should arrive in schools on time; national leaders should praise the teachers for their work, emphasizing the need for the innovation, and in so doing foster a supportive climate that recognizes the difficulties of implementing the change. This support is related to successful implementation. In CA, the leaders are National Curriculum Center, In-service and Education Training at William Pitcher (INSET), and the inspectors for each district.
Educational Attainment

Work Experience in CA

Attitude/Receptivity of the CAP

IMPLEMENTATION

Teachers' perceived support of the Ministry of Education

Perceived adequacy of training in the Continuous Assessment Program

Perceived role of the head-teacher

Figure 8. Conceptual model of the research.
Perceived Adequacy of Initial and Ongoing Training of Teachers

The assumption in this study was that if teachers felt that they had mastered the CA concepts in their initial training and then saw the need to continue as long-life learners in the ongoing workshops, they would be committed to implementing the Continuous Assessment Program. Assistance leads to mastery, mastery to commitment (Miles, 1998), and mastery of new classroom practices means student impact. Adequacy of initial and ongoing training was therefore expected to be positively related with implementation.

Perceived Role of the Head-teacher

The literature reviewed supports the hypothesis that teachers in schools where head-teachers are viewed as instructional leaders will better support a change than in schools where head-teachers are viewed as administrative managers (Capper, 1994; Fullan, 1993; Fullan & Hargreaves, 1992; Glatthorn, 1994). In Swaziland, head-teachers were trained to work as instructional leaders for the Continuous Assessment Program. There are about 24% males and 76% females in the teaching service and yet the system has more male than female head-teachers. Only about a third of head-teachers are female. Robertson (1992), for example, argues that gender neutrality masks androcentrism, which dominates all cultural thought and action. According to Robertson, and this is important to this study, men and women administer differently. Women tend to put relationships with others in the center, spend more time with people, promote communication, motivate others more effectively, and receive greater community support. What does this mean for the relationship between perceived role of the head-teacher and implementation? The relationship would be exploratory.
Instrumentation

Process for the Development of the Questionnaire

The process used in this study to develop the questionnaire was that suggested by McMillan and Schumacher (2001). Figure 8 illustrates the process used in developing the questionnaire for this study.

![Diagram of the process](image)

Figure 8. Process used in developing the Continuous Assessment (CA) Instrument.

Justification

The first step in questionnaire development was to ensure that there was no other more reliable and valid technique than that of using the survey questionnaire for this study. The use of a survey questionnaire has some definite advantages over other methods of collecting data that are not available through other sources. In comparison to the use of the interview procedure, for example, a questionnaire is much more efficient in that it requires less time, is less expensive, and permits collection of data from a much larger sample. In addition, the data can be collected from each questionnaire in the same manner. Much thought was given to ascertain that no existing instrument could be used or adapted for use instead of preparing a new one. Time can be saved if an instrument with established reliability and validity is available for use in a study. However, using an instrument just because it is there is not necessarily a good idea. If you want appropriate answers you have to ask appropriate questions. For this study it was necessary, therefore, to develop an instrument specifically designed for the Continuous Assessment Program.
There was no existing instrument that was appropriate for the Continuous Assessment Program since the Continuous Assessment Program is a unique program for Swaziland. The second step was to list the specific objectives that the information collected by the questionnaire would achieve.

**Defining Objectives**

The specific objectives that the information from the responses to the items in the questionnaire was to achieve were listed as:

1. To provide demographic information of the subjects
2. To determine to what extent teachers are implementing the Continuous Assessment Program
3. To assess the personal and institutional factors related to the implementation of the Continuous Assessment Program
4. To find out any problems teachers face when implementing the Continuous Assessment Program and suggest solutions to those problems.

**Writing of Items That Measured Different Variables**

Once the objectives were defined and it was ascertained that no existing instrument could be used, the first draft of the instrument was constructed. The items were written by objective. Each group of items represented an operationalization of the concept being measured. Items were constructed in this order:

Nine items were to measure demographic data, 3 items were constructed to measure the writing of clearly defined objectives, 3 items were to measure developing and giving of CRT, 7 items were for measuring the providing of remedial activities, 6 items were constructed for measuring providing of enrichment activities, 2 items were for
measuring the keeping of proper records, 8 items were to measure attitude toward the Continuous Assessment Program, 5 items were to measure perceived support from the Ministry of Education (NCC, INSET, and inspectors), and 12 items were to measure perceived adequacy of training. Four items were placed in part B of the questionnaire to measure general impression of the Continuous Assessment Program, problems teachers encountered when implementing the Continuous Assessment Program, and how teachers thought these problems might be solved. All four questions in this section were open-ended. Altogether, the draft questionnaire had a total of 59 items (see Appendix B).

**Construction of the General Format**

The next step was to construct a general format for Section A that included all closed-form items that measured the variables listed in the previous section. Section B used open-form items in which questionnaires were expected to write in any response they wanted. For 600 subjects, it was decided that it would be appropriate to use closed-form items. All items were clear, short, and simple. Negative and biased items were avoided.

**Validation of the Instrument**

After the questionnaire was constructed the dissertation committee reviewed and approved it, then it was sent to the expert judges, as a first draft. To validate this instrument expert judgment was done. The study utilized 10 subjects for expert judgment (also known as expert appraisal). They included 5 senior staff or contact persons from the NCC, 3 senior staff from INSET, and 2 University of Swaziland (UNISWA) professors in education. The NCC and INSET staff had been involved in the Continuous Assessment Program for at least 5 years. One University of Swaziland professor had
been involved in the formative evaluation of the remediation and enrichment study that involved third-grade teachers only. The other professor worked in the Education Department at University of Swaziland. All 10 judges reviewed and sent back feedback for this study.

The purpose of expert appraisal was to ensure that an adequate number and appropriate questions were being asked, sometimes referred to as face and content validity. The expert judges were encouraged through a cover letter (see Appendix B) to make comments and suggestions concerning directions regarding procedures and specific items. Expert judges were requested to say whether they thought the instrument was measuring, adequately, all four components of the Continuous Assessment Program.

The feedback from all 10 experts was used to make the following changes: The first part of Section A that described the questionnaire (See Appendix B) was removed from the questionnaire to the letter to the Pilot teachers. This left the questionnaire with only the major components of CA and instructions for responding. Item 6, "For how long have you used CA Strategies in your teaching" was changed to "Teaching Experience in CA." The response for this item was also changed from responses of never, 1-3, 4-6, >7 to the four choices of < 2 years, 2-4, 5-7, >7. Items 8 (teaching experience) and 9 (present grade you teach) were deleted or removed as feedback showed that they were not necessary. Items 13, 14, and 23, which previously had yes and no responses, were changed to the Likert scale. The undecided option was changed to "slightly agree" option. The last question in the open-ended section, "Do you have any comments about CA?" was changed to "Do you have any suggestions on the monitoring and implementation of CA?" Finally the instruction "Please check the most appropriate
response” was changed to what was acceptably termed familiar expression for Swazi teachers as “Please circle only one answer for each statement.” As illustrated, the feedback from the expert judges was most valuable and appropriately used to improve the new instrument for the pilot phase. The end product of this phase was an improved version of the instrument for piloting.

**Piloting the Questionnaire**

For the pilot study, the NCC senior evaluator was asked to identify teachers using the criteria drawn by the researcher as given in Table 1. Since there were only 50 teachers to be contacted, and the teachers were within reachable distance by car, the senior evaluator delivered the questionnaires to the selected teachers in person. The teachers were asked to read all instructions carefully and mail their responses as soon as they could to the evaluator from NCC using the provided pre-paid, self-addressed envelopes. The questionnaires were given space to write comments about individual items and the questionnaire as a whole. The teachers in the pilot sample were also asked to write comments about the survey directions, recording procedures, and specific items (see Appendix B).

Pre-testing the questionnaire provided the information about deficiencies and suggestions for further improvement. Briefly, the main purpose of pre-testing the instrument was to check for ambiguity, confusion, and poorly prepared items. Whereas the feedback from expert judges was mainly from experts who had either been involved in designing CA or researching on certain aspects of the Continuous Assessment Program, the feedback from the pilot testing was from the teachers, who in many ways...
represented the sample in the main study. Of the 50 teachers invited to participate in the pilot study, 38 (76%) responded to all parts of the questionnaire and in time for analysis.

**Feedback From the Pilot Study**

All feedback was carefully studied and considered. The feedback showed that it took from 15 minutes to 30 minutes to fill in the questionnaire. Items were said to be clear, easily readable, and not confusing. The only changes were in the numbering of items. The number 41 had been skipped. This was changed. By the time of piloting, the questionnaire had been revised at least two times, making it better at each revision. The end product of the use of the pre-test feedback was a revised instrument and cover letter that were ready to be mailed to the already selected research participants. The entire phase of piloting instruments took 6 months.

**Description of the Final Format of the Instrument**

The questionnaire was divided into two main parts. Part I had six sections (A through F) using closed-form items, also known as structured, selected responses or closed-ended. Part II had open-ended items.

**Part I:** Section A consisted of items that measure demographic data. It had 6 items (1-6). Section B had 19 items (7-25) that measured the major components of CA (using behavior objectives, giving CRT, providing remediation, providing enrichment, and keeping proper records). Section C had 14 items (26-39) that measured the attitudinal factors that affect implementation. Sections D and E together had 9 items (40-48) that measured perceived support for CA by the Ministry of Education (NCC, INSET, and Inspectorate). Section F had 11 items (49-59) that measured perceived adequacy of the initial and ongoing training for teachers in the Continuous Assessment Program.
Part II: There were 4 items (60-63) in Part II (See Appendix B). These, as stated, were open-ended questions and were expected to enable the questionnaires to give their general impression of the Continuous Assessment Program and suggestions for monitoring of the same program. It was assumed that if any problems were being encountered, they would be revealed in this section.

One sure lesson from the pilot phase was that questionnaires could not be expected to be mailed back to the NCC if the study was to be done as scheduled. It was important to ensure that the contact persons collect all questionnaires on arranged dates.

Reliability of the Instrument

To enhance reliability all subjects were given the same directions, had the same time frame in which to return the questionnaires and no unusual circumstances were reported during data collection, and finally the instrument was of an appropriate reading level and language for the Swazi teachers. This was achieved by the two revisions done for the instrument as reported in the expert judges’ feedback and the pilot study feedback and improvement.

The items of the CA instrument were not scored for correctness. Because there was a range of acceptable responses, the test for Internal Consistency (Cronbach’s Alpha) was used to establish reliability. Cronbach’s alpha is the most appropriate type of reliability for survey research and other questionnaires in which there is a range of possible answers for each item. Cronbach’s alpha was applied to a group of items according to the variable being measured. Items 26-39 that measured teachers’ attitude toward CA had a reliability coefficient of Alpha .9413. Items 35, 36, and 37 measuring the perceived role of the head-teacher in the Continuous Assessment Program had a
reliability coefficient of Alpha .8769. Items 40 to 46 that measured perceived support of the Ministry of Education yielded a reliability coefficient of .8881. Items 9-59 measured perceived adequacy of initial and ongoing training; these items yielded an alpha of .8742.

All the Alpha(s) were above .70, the highest being .9413 and the lowest being .8769. If the coefficient is high, the items are highly reliable. It can be concluded that the instrument has high internal consistency. In addition Table 2 shows scale means, standard deviations, and reliability coefficients for each group of items used. All the reliability coefficients are clearly above .70.

Table 2

*Scale Means, Standard Deviations, and Reliability Coefficients for Variables in the CA*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Items</th>
<th>Scale Mean</th>
<th>SD</th>
<th>Possible Range</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of implementation</td>
<td>7-22</td>
<td>53.03</td>
<td>9.25</td>
<td>16-80</td>
<td>0.80</td>
</tr>
<tr>
<td>Attitude toward CAP</td>
<td>26-39</td>
<td>38.15</td>
<td>13.57</td>
<td>14-90</td>
<td>0.94</td>
</tr>
<tr>
<td>Perceived Support of MoE</td>
<td>40-46</td>
<td>18.18</td>
<td>6.56</td>
<td>7-35</td>
<td>0.89</td>
</tr>
<tr>
<td>Perceived adequacy of training</td>
<td>49-59</td>
<td>36.87</td>
<td>8.96</td>
<td>11-55</td>
<td>0.87</td>
</tr>
<tr>
<td>Role of head-teacher</td>
<td>36-38</td>
<td>9.33</td>
<td>3.61</td>
<td>3-15</td>
<td>0.88</td>
</tr>
</tbody>
</table>

Procedure

The distribution of questionnaires for the main study is illustrated in Figure 9.
Prior to the distribution of the questionnaire, letters were mailed to all participating schools to get their approval. This was done about 1-2 months before the actual survey.

A team of five people acted as the main contact persons for this research. Of these five, there was an overall supervisor, a University of Swaziland lecturer. Four were from NCC. Each of the four was in charge of data collection for a district.

As soon as the revised instrument and cover letter were ready, they were sent to the overall supervisor for the research, the UNISWA lecturer. The lecturer then delivered them, in person, to the NCC contact persons, who in turn delivered them to schools. At each school the contact persons appointed a senior teacher to whom all teachers would give the questionnaires after they had been completed. Having done that, the contact persons delivered the questionnaires to all teachers in the participating schools.

Figure 9. Distribution of questionnaires for main study.

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Questionnaires for teachers who may not have been present at school on that day were left with the coordinating senior teacher for each school.

The contact persons and the senior teacher arranged dates on which questionnaires were to be collected. To give teachers enough time to fill in the questionnaires, all teachers were asked to hand in the questionnaires to the appointed senior teacher, the coordinator in each school, in 2 weeks' time. The contact persons left the schools having promised to return in at least 3 weeks from whatever date they had delivered the questionnaires. The questionnaires were collected on arranged dates from an appointed senior teacher within the school. Collecting questionnaires has been a commonly used method in Swaziland to ensure a high response rate. Mailing questionnaires has always taken long periods before one gets responses back.

Because of long distances to be covered for travel and slow mail delivery processes, there was only one follow-up reminder for the non-questionnaires. The follow-up was in this form: the contact person brought additional questionnaires on the day he/she returned to each school to collect the filled-in questionnaires. This was done just in case some teachers had misplaced the first copies, or had not, for some reason, filled in their first questionnaire. Since returning to all the schools would not be practical, the contact person waited for any questionnaires to be filled in at this time and finally leave when all those willing to participate in the research had completed the questionnaire.

As soon as all the questionnaires had been collected, the contact persons based at NCC got in touch with the UNISWA lecturer, who collected these and mailed them to me in the United States.
Data Analysis

Data analysis for this study involved the analysis of quantitative and qualitative data. Data from Part I of the questionnaire were used to conduct quantitative analysis of relationships between independent variables and the implementation of the Continuous Assessment Program; data from Part II of the questionnaire were used to conduct qualitative analysis focused upon identifying problems and solutions relative to the Continuous Assessment Program. The computer program that was used for analysis in this study is the Statistical Package for Social Sciences (SPSS). Specific statistical tests were performed for particular questions. (See Table 3.)

Demographic Data

The first section of the questionnaire with demographic data has “nominal variables.” The numerical codes were assigned to possible responses for this section. These codes were used as mere labels or names. Analysis of this section used frequency tables. For precision, numbers, and not charts, were used. Table 3 summarizes the statistical tests that were used to analyze each research question and hypothesis.

Major Research Questions

Research Question 1: To what extent are the primary schools teachers in Swaziland implementing the Continuous Assessment Program (CAP)?

Implementing the Continuous Assessment Program is shown by the following indicators: (1) using well-stated objectives, (2) giving CRT, (3) conducting remediation, (4) conducting enrichment, and (5) keeping proper records. Responses to items 7 through
Table 3

Research Questions, Hypotheses, Instruments, and Statistical Analysis

<table>
<thead>
<tr>
<th>Question/Hypotheses</th>
<th>Variables</th>
<th>Statistical Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent is the Continuous Assessment Program being implemented?</td>
<td>7-22</td>
<td>Frequencies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean &amp; Standard Deviations</td>
</tr>
</tbody>
</table>
| 1. There is a significant relationship between the teachers' education attainment and degree of implementation of Continuous Assessment Program. | IND = Level of education, item 3  
DEP = 7-22  
(degrees of implementation)  
IND = Level of education  
DEP = 23, 24, 25 | Univariate Analysis of Variance (ANOVA) Chi-Square Tests |
| 2. There is a significant relationship between teachers' work experience in CA and the degree of implementation of the Continuous Assessment Program. | IND = Work experience, 3  
DEP = 7-22 | Univariate Analysis of Variance (ANOVA) |
| 3. There is a significant relationship between teachers' receptivity (attitude) of the Continuous Assessment Program and the degree of implementation. | IND = Attitude, 26-39  
DEP = 7-22 | Pearson Correlation (2-tailed) |
| 4. There is a significant relationship between the teachers' perceived support of the Ministry of Education (NCC, INSET, Inspectorate) and the degree of implementation of the Continuous Assessment Program. | IND = 40-46  
Perceived support Ministry of Education  
DEP = 7-22 | Pearson Correlation (2-tailed) |
| 5. There is a significant relationship between the teachers' perceived adequacy of initial and ongoing training the Continuous Assessment Program and the degree of implementation. | IND = 49-59  
Perceived adequacy of training  
DEP = 7-22 | Pearson Correlation (2-tailed) |
| 6. There is a significant relationship between the teachers' perceived role of the head-teacher in the Continuous Assessment Program and the degree of implementation. | IND = 35-37  
Perceived role of head-teacher  
DEP = 7-22  
Degree of implementation | Pearson Correlation (2-tailed) |
| 7. There is a multiple relationship between the variables of educational attainment, work experience in CA, teachers' attitude toward CA, teachers' perceived support of the Ministry of Education, teachers' perceived adequacy of initial and ongoing training in CA, teachers' perceived role of the head-teacher in CA and implementation. | Predictors: Teaching experience, perceived support from Ministry of Education, perceived adequacy of training, perceived role of head-teacher, years of education | Multiple Regression |

Note.  DEP= Dependent Variable; IND= Independent Variable.
25 were used to determine the extent to which these are being done. Frequency
distribution was generated to determine the extent of implementation for each of the
continuous assessment components. Means and standard deviations were calculated for
each item. A detailed analysis of the spread of items was also done (see Appendix A).

Research Question 2. What personal and institutional factors are related to the
implementation of the Continuous Assessment Program?

Seven null hypotheses were tested to determine the relationships between
independent variables and the degree of implementation. Four statistical tests were
performed using SPSS: Univariate Analysis of Variance (ANOVA), Correlations, Cross
tabulation, Chi-Square, and Multiple Regression Analysis.

Testing the Hypotheses

Hypothesis 1 stated that there is no relationship between teachers' educational
attainment and degree of implementation. Item number 3 was used to measure the
teachers' educational attainment. To begin with, item 3 had seven categories namely,
Primary Teachers' Certificate (PTC), Primary Teachers' Diploma (PTD), Secondary
Teachers Certificate (STC), Secondary Teachers' Diploma (STD), Bachelor of Education
in primary education (B.Ed.), Bachelor of Art in education (B.A.Ed.), and other. It was
noticed that the number of teachers reporting PTC were 280 and those for PTD were 165.
Four teachers had a STC and 15 had a STD. The teachers reporting B.Ed. were 16 and 4
teachers had a B.A.Ed. There were 22 teachers reporting “other” and these had a
Cambridge School Certificate, a requirement to enable one to work as “Student Teacher”
in Swaziland. Additionally, these Cambridge School certificate holders would generally
be regarded as having a lower status than the PTC holders.
In view of these categories, it was decided to combine the categories of “other” and PTC to read PTC and lower, STC and STD were combined to read STC/STD and B.Ed. and B.A.Ed. were also combined to read B.Ed./B.A.Ed. The new categories, therefore, were PTC or lower, PTD, STC/STD (secondary certification) and B.A.Ed./B.Ed. (Bachelors). To determine the relationship between educational attainment and degree of implementation, item 3 (educational level) was used as an independent variable and items 7 through 22, representing the degree of implementation, were used as the dependent variable.

By using ANOVA, a test of equality of means of the groups (PTC and lower; PTD: STC/STD: Bachelors) was done. Further, a subhypothesis that there is no relationship between a teacher’s educational level and the number of times in the week remedial work is given was tested. Since variables, educational level, and number of times remedial work is given were discrete or nominal, Chi-Square was used to test for significance.

Hypothesis 2 stated that there is no relationship between teachers’ work experience in CA and the degree of implementation. Item number 4 was used to measure the teachers’ teaching experience in CA. To determine the relationship between this variable and degree of implementation, item 4 was compared with each of the items in 7 through 22, the implementation items. For this comparison, work experience (item 4) was used as the independent variable and degree of implementation (items 7 through 22) was used as the dependent variable. Univariate Analysis of Variance (ANOVA) was used to test this relationship.

Hypothesis 3 stated that there is no relationship between teachers’ attitude
toward the Continuous Assessment Program and the degree of implementation. Items 26 through 39 measured teachers' attitude toward CA, whereas items 7 through 22 measured implementation. To determine the relationship between the variables of attitude toward the CAP and implementation, Pearson product – moment correlation was used.

Hypothesis 4 stated that there is no relationship between the teachers’ perceived support of the Ministry of Education (NCC, INSET, and Inspectorate) and the degree of implementation of the Continuous Assessment Program. The teachers’ perceived support of the Ministry of Education (NCC, INSET, and Inspectors) was measured by items 40 through 48. However, the items were placed in two categories. To determine the relationship between support from the Ministry of Education and implementation, items 40 through 46 were correlated with implementation items 7 through 22 using Pearson Correlation, 2-tailed. Further, frequencies were calculated for items 47 (How many times in the year does INSET staff visit your school to help in CA?) and 48 (How many times do inspectors visit schools in a year?).

Hypothesis 5 stated that there is no relationship between the teachers’ perceived adequacy of initial training and ongoing training of CA and implementation. Items 49 through 59 were designed to measure perceived adequacy of initial and ongoing training in CA. To determine the relationship between the variable of perceived adequacy of training and dependent variable of degree of implementation, Pearson product – moment correlation was used.

Hypothesis 6 stated that there is no relationship between the teachers’ perceived role of the head-teacher in the Continuous Assessment Program and the implementation of CA. Items 35, 36, and 37 were designed to measure
teachers' perceptions of the role of their head-teachers. To determine the relationship between the perceived role of head teacher and degree of implementation, Pearson product – moment correlation was used.

Hypothesis 7 stated that there is no relationship between the variables of (a) educational attainment, (b) work experience in CA, (c) teachers' attitude toward the Continuous Assessment Program, (d) teachers' perceived support of the Ministry of Education, (e) perceived adequacy of initial and ongoing training, (f) teachers' perceived role of the head-teacher in the Continuous Assessment Program, and implementation.

The variables (also known as predictors) of educational attainment, work experience in CA, teachers' attitude toward the Continuous Assessment Program, teachers' perceived support of the Ministry of Education, teachers' perceived adequacy of initial and ongoing training, and teachers' perceived role of their head-teachers in the Continuous Assessment Program were measured by items 3, 4, 26 through 39, 40 through 48, 49 through 59, and 35 through 37 respectively. To determine relationship of these many variables, at the same time, with implementation, multiple regression was applied. First, the variable of education level was converted to number of years in school. Then, using multiple regression, all the independent variables: teaching experience in CA, attitude toward the Continuous Assessment Program, perceived support from Ministry of Education, perceived adequacy of training, perceived role of head teacher, and number of years of education were analyzed at the same time for their relationship to implementation.
Data Analysis for Open-ended Section

Part II of the questionnaire had four open-ended items: (a) What is your general impression of CA? (b) What problems do you encounter in doing CA? (c) How do you think the problems you encounter in doing CA can be solved? (d) Do you have any comments or suggestions on the monitoring and implementation of CA? All four questions can be considered as semi-structured in that they have no choices from which the questionnaires select an answer. Rather, the questions were phrased to allow for individual responses. However, all the questions were specific in their intent. The combination of structured and semi-structured questions in this study provided a high degree of objectivity and uniformity while at the same time allowing me to ask probing questions. Each question in Part II is a predetermined category or theme. For example, the categories delivered from the questions are: (a) general impressions of the Continuous Assessment Program, (b) problems encountered in the Continuous Assessment Program, (c) solving problems encountered in the Continuous Assessment Program, and (d) suggestions on the monitoring and implementation of the Continuous Assessment Program.

It is important to note that as soon as an open-ended section is placed in any questionnaire, some responses will be inconsistent with questions presented. Responses to the four questions were placed wherever the questionnaire desired. For example, responses to item 60 (What is your general impression of CA?) were, in some cases, placed by the teachers as responses for Question 63 (Do you have any comments or suggestions on the monitoring and implementation of CA?). Analyzing qualitative data is eclectic as there is no one "right" way. Data can be analyzed in more than one way.
Each analyst must find his or her own style of intellectual craftsmanship (McMillan & Schumacher, 2000).

**Entering All Responses From Each Questionnaire**

Each question was typed out and all responses for that question were entered in a tabular form shown in Table 4. This is an extract from the first action.

This tabular form enables the researcher first, at a glance, to see what an individual teacher was saying about the four questions. Second, looking across the extract easily captured any repetitions. Third, responses that were misplaced as discussed earlier were easily spotted. The number of teachers who responded to each question was reported.

**Scanning All Data Collected for Possible Themes and Patterns**

The intensive analysis began with the reading and re-reading of all the data to gain a sense of the whole. The emphasis in the second step was to gain a global perspective of the range of possible categories or themes of responses. At this time, a rough idea of the possible categories of responses was known. The third step was to manually color-code the main themes.

**Coding the Main Themes or Ideas**

During the reading and re-reading of data it was apparent that certain ideas, problems, suggestions, and comments were recurring. These ideas formed the main categories for each question. For question 59 "What is your general impression CA?" the main categories included CA was a good idea (with many 'however'), CA was a bad idea (followed by explanations), or no impressions were given. Three main colors were
assigned: The "good idea" statements were highlighted in blue, the "bad idea" statements were highlighted in green, and the "no impression" was shown in red. For question 60, "What problems do you encounter in CA?" many problems were listed. Ten main themes were color-coded.

Table 4

Questions and Responses for Qualitative Data

<table>
<thead>
<tr>
<th>What is your general impression of CA?</th>
<th>What problems do you face in doing CA?</th>
<th>How do you think the problems you encounter in doing CA can be solved?</th>
<th>Do you have any comments or suggestions on the monitoring and implementation of CA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It has improved the standard of education because the children are able to come up even if they were performing badly.</td>
<td>Large class; lack of facilities; lack of time</td>
<td>Reduce the number of pupils in class</td>
<td>CA materials should be distributed in schools.</td>
</tr>
<tr>
<td>2. It helps teachers find out what a child can do or cannot do and give help immediately. CA is also good in that given time every child is a successful learner</td>
<td>There is not enough time to do remediation as we have big numbers in class. There is too much recording.</td>
<td>Reduce number of pupils in class. Give more CA zonal follow-ups.</td>
<td>I suggest that Government should work hand in hand with teachers and make changes where possible so that it will be workable in class</td>
</tr>
</tbody>
</table>

For question 3, "How do you think the problems you encounter in doing CA can be solved?" the same colors used for problems were used for their suggested solutions. For example, the suggestion to reduce class sizes was coded purple as was the problem of large class sizes in question 60. For question 4, "Do you have any comments or suggestions on the monitoring and implementation of CA?" there was a significant repetition of what had been stated in either question 1 or 3. Three colors were used for the categories of "let INSET, NCC and inspectors visit schools" (blue), "let the Ministry
of Education provide all necessary tools with which to implement CA” (pink), and “do away with CA (red).

The use of highlighters was extremely valuable since at a glance one could see if anything had been ignored. Having identified all the themes, a count was done for each theme. For example, the number of teachers reporting large classes was counted, and this was irrespective of where the response was placed on the questionnaire. This was done for all four questions.

**Narrowing the Focus**

It is almost impossible to interpret qualitative data unless one organizes them, and as literature (Gay, 2000; McMillan & Schumacher, 2001) points out, making sense of the data depends largely on the researcher’s experience and insight. It can be argued that the recurring responses implied a narrowing of focus for intensive data analysis. For example, from the responses it became clear that the teachers were either saying CA is a good idea, a bad idea, or “no impressions.” A summary of the report was done and in some cases two or three ideas were combined into one. The last step in this phase was to let the data “speak for itself” as quotations were made available to support the summary on each question.
CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Overview

The present study sought to investigate the extent to which primary school teachers in Swaziland are implementing the Continuous Assessment Program (CAP). Further, it was intended to determine the personal and institutional factors that are related to the implementation of the Continuous Assessment Program. This chapter is divided into four major sections. The data are presented in the following order: description of the demographics of the population, the extent of implementation, the testing of the hypotheses, and findings from the open-ended section as well as the problems teachers face during the implementation of the Continuous Assessment Program.

Descriptive Analysis of the Sample

A proportionally stratified random sample was drawn from the 538 primary schools of Swaziland. This was determined to be 54 schools in total, which is just over 10% of the total population. All teachers of Grades 1 through 7 in the 54 schools were invited to participate in the study. The total number of teachers was 600, which is about 10% of the total population of primary-school teachers in Swaziland. Five hundred and twenty teachers, representing 86.7% of the sample, responded correctly to most
directions. Three teachers seemed not to have read the instructions and their responses were not included in the sample.

Demographic data of the sample are presented in Table 5. Of the 520 teachers, 117 (22.5%) were male, 379 (72.9%) were female, and 24 (4.6%) teachers did not state their gender. Three (.6%) teachers were less than 20 years old and 34 (6.5%) teachers were between the ages of 21 and 25. Seventy-five (14.4%) teachers were between the ages of 26 and 30. Ninety-five (18.3%) teachers were between the ages of 31 and 35. One hundred and seven (20.6%) teachers were between the ages 35 and 40, and 200 (38.5%) teachers were 40 years old or more. Six (1.2%) did not say what their age was.

Also represented in the study were 302 (58.1%) teachers with a Primary Teachers Certificate or lower. One hundred and sixty-five (31.7%) teachers had a Primary Teachers' Diploma. Nineteen (3.7%) teachers had a Secondary Teachers' Certificate or Secondary Teachers' Diploma. Twenty (3.8%) teachers had a Bachelor of Arts in Education, a Bachelor of Science or a Bachelor of Education. Fourteen (2.7%) did not say what qualifications they had.

Sixty-four (12.3%) teachers had a teaching experience of less than 2 years. One hundred and forty-five (27.9%) teachers had a teaching experience in Continuous Assessment (CA) of 2 to 4 years. One hundred and twenty-one (23.3%) teachers had 5 to 7 years teaching experience in CA, and 175 (33.6%) teachers had more than 7 years experience in CA. Fifteen (2.9%) teachers did not say how long they had been doing CA. Ninety-eight (18.8%) teachers were from urban schools, 158 (30%) were from semi-urban, and 242 (47%) said they were from rural schools. Twenty-two (4.2%) did not indicate their location.
Table 5

Demographics of the Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>117</td>
<td>22.5</td>
</tr>
<tr>
<td>Female</td>
<td>379</td>
<td>72.9</td>
</tr>
<tr>
<td>Missing</td>
<td>24</td>
<td>4.6</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
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<tr>
<td>Less than 20</td>
<td>3</td>
<td>.6</td>
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<tr>
<td>21-25</td>
<td>34</td>
<td>6.5</td>
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<tr>
<td>26-30</td>
<td>75</td>
<td>14.4</td>
</tr>
<tr>
<td>31-35</td>
<td>95</td>
<td>18.3</td>
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<tr>
<td>36-40</td>
<td>107</td>
<td>20.6</td>
</tr>
<tr>
<td>Over 40</td>
<td>200</td>
<td>38.5</td>
</tr>
<tr>
<td>Missing</td>
<td>6</td>
<td>1.2</td>
</tr>
<tr>
<td>Level of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Teachers’ Certificate</td>
<td>302</td>
<td>58.1</td>
</tr>
<tr>
<td>Primary Teachers’ Diploma</td>
<td>165</td>
<td>31.7</td>
</tr>
<tr>
<td>Secondary Certification</td>
<td>19</td>
<td>3.7</td>
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<tr>
<td>Bachelor Degree</td>
<td>20</td>
<td>3.8</td>
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<tr>
<td>Missing</td>
<td>14</td>
<td>2.7</td>
</tr>
<tr>
<td>Teaching Experience in CA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 2 years</td>
<td>64</td>
<td>12.3</td>
</tr>
<tr>
<td>2-4 years</td>
<td>145</td>
<td>27.9</td>
</tr>
<tr>
<td>5-7 years</td>
<td>121</td>
<td>23.3</td>
</tr>
<tr>
<td>More than 7 years</td>
<td>175</td>
<td>33.7</td>
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<tr>
<td>Missing</td>
<td>15</td>
<td>2.9</td>
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<tr>
<td>Class Sizes</td>
<td></td>
<td></td>
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<tr>
<td>8-20</td>
<td>13</td>
<td>2.5</td>
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<tr>
<td>21-40</td>
<td>135</td>
<td>26.0</td>
</tr>
<tr>
<td>41-60</td>
<td>251</td>
<td>48.3</td>
</tr>
<tr>
<td>61-80</td>
<td>41</td>
<td>7.9</td>
</tr>
<tr>
<td>81-100</td>
<td>14</td>
<td>2.7</td>
</tr>
<tr>
<td>101-128</td>
<td>7</td>
<td>1.3</td>
</tr>
<tr>
<td>Missing</td>
<td>59</td>
<td>11.3</td>
</tr>
</tbody>
</table>
Class sizes ranged from 8 to 128. The mean was 46.75, the mode was 50 and the standard deviation was 14.925.

**Extent or Degree of Implementation**

**Using Clearly Defined Objectives**

Items 7, 8, and 9 measured teachers' use of objectives from National Curriculum Center (NCC) books. The mean responses reveal that teachers often understand and use objectives from NCC books ($M=3.97, SD=1.040$). A total of 347 (66.7%) said they use the NCC objectives either often or always. As far as writing their own objectives from NCC books, teachers reported that they sometimes ($M=2.92, SD=1.207$) do this. These results reveal teachers' dependency on NCC-prepared instructional materials. (See Table 6 and Appendix A.)

**Giving Criterion Referenced Tests (CRT)**

Items 10, 11, and 12 measured the giving of CRT. Teachers' mean response to giving of CRT was 3.34 ($SD=1.150$), suggesting that teachers sometimes give CRT developed by NCC. A total of 205 questionnaires (39.4%) reported that they give CRT developed by NCC most of the time, while 37 (7.1%) said they never give the same (see Table 6 and Appendix A). Teachers also reported that developing CRT for daily lessons is not done all the time ($M=3.36, SD=1.173$), while giving of CRT for units is done a little more ($M=3.53$). (See Table 6 and Appendix A.)

**Providing Remedial Activities to Non-Masters**

Items 13, 14, 15, 16, and 17 measured the providing of remedial work in the Continuous Assessment Program.
Table 6

*Means and Standard Deviations of Extent or Degree of Implementation*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. I use NCC objectives as written in the NCC books.</td>
<td>514</td>
<td>3.97</td>
<td>1.040</td>
</tr>
<tr>
<td>8. I write my own objectives from NCC books.</td>
<td>508</td>
<td>2.92</td>
<td>1.207</td>
</tr>
<tr>
<td>9. I understand the objectives from NCC books.</td>
<td>516</td>
<td>3.97</td>
<td>.989</td>
</tr>
<tr>
<td>10. I give CRT developed by NCC.</td>
<td>472</td>
<td>3.36</td>
<td>1.173</td>
</tr>
<tr>
<td>11. I develop CRT for each lesson.</td>
<td>461</td>
<td>3.34</td>
<td>1.150</td>
</tr>
<tr>
<td>12. I give CRT for each unit.</td>
<td>468</td>
<td>3.53</td>
<td>1.164</td>
</tr>
<tr>
<td>13. I give remedial work.</td>
<td>513</td>
<td>3.64</td>
<td>1.129</td>
</tr>
<tr>
<td>14. I have time to help non-masters.</td>
<td>515</td>
<td>3.23</td>
<td>1.182</td>
</tr>
<tr>
<td>15. I prepare my own remedial work.</td>
<td>511</td>
<td>3.34</td>
<td>1.138</td>
</tr>
<tr>
<td>16. I depend on remedial activities from NCC.</td>
<td>510</td>
<td>2.73</td>
<td>1.160</td>
</tr>
<tr>
<td>17. I prepare remedial work with other teachers.</td>
<td>510</td>
<td>2.11</td>
<td>1.173</td>
</tr>
<tr>
<td>18. I give enrichment work.</td>
<td>500</td>
<td>3.60</td>
<td>1.127</td>
</tr>
<tr>
<td>19. I give enrichment work only when necessary.</td>
<td>499</td>
<td>3.59</td>
<td>1.069</td>
</tr>
<tr>
<td>20. I prepare enrichment activities before I teach a lesson.</td>
<td>500</td>
<td>2.91</td>
<td>1.364</td>
</tr>
<tr>
<td>21. I have time to prepare enrichment work.</td>
<td>509</td>
<td>2.88</td>
<td>1.271</td>
</tr>
<tr>
<td>22. I keep accurate records of my pupils' progress.</td>
<td>507</td>
<td>4.03</td>
<td>1.181</td>
</tr>
<tr>
<td>23. I give remedial work/times each week.</td>
<td>502</td>
<td>2.01</td>
<td>0.889</td>
</tr>
<tr>
<td>24. I give enrichment work/times each week.</td>
<td>497</td>
<td>1.96</td>
<td>0.885</td>
</tr>
</tbody>
</table>

Teachers reported that they sometimes prepare their own remedial work ($M=3.34$, $SD=1.138$), but they do not often prepare remedial work with other teachers ($M=2.11$, $SD=1.173$). Sometimes they depend on NCC-prepared activities for the same activity ($M=2.73$, $SD=1.160$). As far as having time to help non-masters, they reported that it
happens sometimes ($M=3.23$, $SD=1.182$). A total of 272 (52.3%) give remedial work most of the time (see Table 6). A total of 203 (39.4%) said they had time for helping non-masters. Thirty-five (6.3%) teachers said they never have time for helping non-masters and about the same number, 33 (6.3%), said they never prepare their own remedial materials. (See Table 6 and Appendix A.)

Providing Enrichment Activities

Items 18, 19, 20, and 21 measured the adequacy of providing enrichment activities. Teachers reported that they often ($M=3.60$, $SD=1.127$) give enrichment work only when necessary ($M=3.59$, $SD=1.069$). However, preparation of enrichment activities is done sometimes ($M=2.91$, $SD=1.364$) before teachers teach a lesson. Although enrichment work is sometimes given, teachers reported that they do not always have time to prepare enrichment activities ($M=2.88$, $SD=1.271$) (see Table 6). A total of 275 (52.9%) said they give enrichment activities to their pupils, while 21 (4.0%) said they never give enrichment activities. Eighty-two (15.8%) teachers reported that they never have time for preparing enrichment activities (see Appendix A). In summary it can be said that whereas half of the teachers give enrichment, the other half do not. (See Table 6 and Appendix A)

Keeping Proper Records

Item 22 measured the keeping of proper records. Teachers reported that they often ($M=4.03$, $SD=1.181$) keep accurate records of their pupils' progress. This item received the highest mean response. In fact, a total of 349 (67.1%) of the sample said
they keep accurate records always or often. Twenty-two (4.2%) said they never keep accurate records (see Table 6 and Appendix A).

Remedial Work Times in Each Week

Item 23 measured how many times in each week teachers give remediation. One hundred and ninety-five (37.5%) teachers said that they give remediation one time each week, 106 (20.4%) teachers said they give remediation 2 times each week, 201 (38.7%) teachers said they give remediation more than two times each week. Eighteen (3.5%) teachers did not respond to this item (see Table 7).

Enrichment Work Times in Each Week

Item 24 measured the number of times teachers said they did enrichment. Two hundred and four (39.2%) teachers said they did enrichment one time each week, 108 (20.8%) teachers said they did enrichment two times each week, 185 (35.5%) teachers said they did enrichment more than two times each week, and 23 (4.4%) did not respond to this item (see Table 7).

Table 7

<table>
<thead>
<tr>
<th>Variable</th>
<th>Once</th>
<th>Twice</th>
<th>&gt;Twice</th>
</tr>
</thead>
<tbody>
<tr>
<td>23. I give remedial work.</td>
<td>195 (37.5%)</td>
<td>106 (20.4%)</td>
<td>201 (38.7%)</td>
</tr>
<tr>
<td>24. I give enrichment work.</td>
<td>204 (39.2%)</td>
<td>108 (20.8%)</td>
<td>185 (35.6%)</td>
</tr>
</tbody>
</table>

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Time of the Day Remediation Is Done

Item 25 measured the time of the day teachers said they do remediation. Two hundred and eighty-three (54.4%) teachers reported doing remediation during the lesson. Twenty (3.8%) teachers said they do remediation during break. Sixty-six (12.7%) said they did remediation after school. Fifty-one (9.8%) said they do remediation just before school starts, and 81 (15.6%) teachers stated other times. Other times included weekends and holidays.

Teachers' Attitude Towards the Assessment Program

Items 26 thorough 39 measured teachers' attitude toward the Continuous Assessment Program. Table 8 shows the means of responses for each item. The attitude toward the Continuous Assessment Program ranges from not liking it ($M=2.23$, $SD=1.180$), to slightly liking it ($M=3.33$, $SD=1.357$). The lowest mean ($M=2.23$, $SD=1.180$) shows that teachers in the schools do not encourage each other in doing CA. as shown in Appendix A, only 116 (22.3%) said that if they had a choice, they would continue using CA. Two hundred and sixty-seven (51.4%) said given a choice they would stop doing CA.

Teachers' Perceived Role of the Head–teacher

Items 36, 37, and 38 measured the perceived role of the head–teacher in the Continuous Assessment Program. The teachers perceived their head-teachers as liking ($M=3.33$, $SD=1.357$) the Continuous Assessment Program better than themselves ($M=2.77$, $SD=1.271$). The item that received the lowest mean ($M=2.72$, $SD=1.348$) was the one which teachers had to say whether their head–teacher helps them to better
understand the Continuous Assessment Program. Teachers did not agree that this was happening (see Table 8).

**Perceived Support of the Ministry of Education**

Items 40 thorough 46 measured perceived support of the Ministry of Education. Teachers slightly agreed ($M=2.78$, $SD=1.202$) that they can depend on NCC to solve some of their problems. They however disagreed that they can depend on either INSET ($M=2.40$, $SD=1.161$) or inspectors ($M=2.04$, $SD=1.050$) to solve some of their problems in Continuous Assessment. (See Table 9.) Table 10 shows that 331 (63.7%) teachers have never been visited by officers from the In-service Education and Training (INSET) to get help in doing continuous assessment (CA). Also shown in this table is that 312 (60%) teachers in this sample have never had a visit from the inspector to get help in CA. Teachers who reported to have been visited by INSET at least once are 103 (19.8%), and those that said they had at least one visit from inspectors are 116 (22.3%). Twenty-two (4.2%) teachers said they have been seen two times by INSET and 28 (5.4%) teachers reported to have been seen two times by inspectors. Only 14 (2.7%) teachers have had visits more than two times in the year by INSET, and only 12 (2.3%) teachers have had a visit from inspectors more that two times in the year.

**Perceived Adequacy of Initial and Ongoing Training**

Items 49 through 59 were meant to measure perceived adequacy of initial and ongoing training in the Continuous Assessment Program. Teachers agreed ($M=4.04$, $SD=1.227$) that there was a need to develop better instructional materials for CA. However, teachers slightly agreed ($M=3.07$, $SD=1.252$) that the training they are getting from ongoing workshops help them to implement CA. (See Table 11.) One hundred and
Table 8

*Means and Standard Deviations of Attitude Toward the Continuous Assessment Program*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>26. I like CA.</td>
<td>511</td>
<td>2.77</td>
<td>1.274</td>
</tr>
<tr>
<td>27. I am interested in CA.</td>
<td>514</td>
<td>2.69</td>
<td>1.258</td>
</tr>
<tr>
<td>28. I am excited about CA.</td>
<td>500</td>
<td>2.31</td>
<td>1.189</td>
</tr>
<tr>
<td>29. I like to give remedial activities in CA.</td>
<td>510</td>
<td>3.12</td>
<td>1.242</td>
</tr>
<tr>
<td>30. I enjoy keeping records in CA.</td>
<td>509</td>
<td>2.76</td>
<td>1.362</td>
</tr>
<tr>
<td>31. I am enthusiastic about enrichment in CA.</td>
<td>496</td>
<td>2.79</td>
<td>1.195</td>
</tr>
<tr>
<td>32. Teachers in my school like CA.</td>
<td>503</td>
<td>2.36</td>
<td>1.159</td>
</tr>
<tr>
<td>33. Teachers in my school encourage me in CA.</td>
<td>509</td>
<td>2.23</td>
<td>1.180</td>
</tr>
<tr>
<td>34. In my school, teachers work as a team in CA.</td>
<td>500</td>
<td>2.47</td>
<td>1.327</td>
</tr>
<tr>
<td>35. My head-teacher likes CA.</td>
<td>501</td>
<td>3.33</td>
<td>1.357</td>
</tr>
<tr>
<td>36. My head-teacher is interested in CA.</td>
<td>505</td>
<td>3.30</td>
<td>1.319</td>
</tr>
<tr>
<td>37. My head-teacher helps me understand CA better.</td>
<td>502</td>
<td>2.72</td>
<td>1.348</td>
</tr>
<tr>
<td>38. If I had a choice, I would continue using CA.</td>
<td>504</td>
<td>2.43</td>
<td>1.349</td>
</tr>
<tr>
<td>39. CA strategies have improved my teaching.</td>
<td>506</td>
<td>2.76</td>
<td>1.379</td>
</tr>
</tbody>
</table>
Table 9

*Means and Standard Deviations of Perceived Support of the Ministry of Education*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>40. NCC staff is able to explain CA concepts that I do not understand very well.</td>
<td>513</td>
<td>3.01</td>
<td>1.286</td>
</tr>
<tr>
<td>41. I depend on NCC to solve some of my problems in CA.</td>
<td>513</td>
<td>2.78</td>
<td>1.202</td>
</tr>
<tr>
<td>42. INSET staff are helpful in identifying where I need help in CA.</td>
<td>490</td>
<td>2.71</td>
<td>1.253</td>
</tr>
<tr>
<td>43. INSET staff are able to explain CA concepts I do not understand well.</td>
<td>508</td>
<td>2.82</td>
<td>1.265</td>
</tr>
<tr>
<td>44. I depend on INSET staff to solve some of my problems in CA.</td>
<td>507</td>
<td>2.40</td>
<td>1.161</td>
</tr>
<tr>
<td>45. Inspectors are able to explain CA concepts that I do not understand very well.</td>
<td>512</td>
<td>2.48</td>
<td>1.331</td>
</tr>
<tr>
<td>46. I depend on inspectors to solve some of my problems in CA.</td>
<td>510</td>
<td>2.04</td>
<td>1.050</td>
</tr>
</tbody>
</table>

Table 10

*Number of Times in the Year Inspectors or INSET Visit Schools*

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Once</th>
<th>Twice</th>
<th>Thrice</th>
</tr>
</thead>
<tbody>
<tr>
<td>47. How many times in the year does INSET visit your school to help you in CA?</td>
<td>331 (63.7%)</td>
<td>103 (19.8%)</td>
<td>22 (4.2%)</td>
<td>14 (2.7%)</td>
</tr>
<tr>
<td>48. How many times in the year do inspectors visit your school to help you in CA?</td>
<td>312 (60%)</td>
<td>116 (22.3%)</td>
<td>28 (5.4%)</td>
<td>12 (2.3%)</td>
</tr>
</tbody>
</table>

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Table 11

*Means and Standard Deviation of Perceived Adequacy of Initial and Ongoing Training of the Continuous Assessment Program*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>49. My initial training in CA was adequate (sufficient) to implement CA.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50. I need more training in CA to implement it well</td>
<td>504</td>
<td>3.46</td>
<td>1.374</td>
</tr>
<tr>
<td>51. There is ongoing training in CA in the zonal follow-up workshops.</td>
<td>509</td>
<td>3.16</td>
<td>1.310</td>
</tr>
<tr>
<td>52. The training I am getting at ongoing workshops helps me to implement CA.</td>
<td>504</td>
<td>3.07</td>
<td>1.252</td>
</tr>
<tr>
<td>53. There is a need to develop better instructional material for CA.</td>
<td>507</td>
<td>4.04</td>
<td>1.227</td>
</tr>
<tr>
<td>54. Using clearly defined objectives.</td>
<td>492</td>
<td>3.36</td>
<td>1.223</td>
</tr>
<tr>
<td>55. Writing clearly defined objectives</td>
<td>476</td>
<td>3.42</td>
<td>1.170</td>
</tr>
<tr>
<td>56. Giving CRT.</td>
<td>472</td>
<td>3.25</td>
<td>1.125</td>
</tr>
<tr>
<td>57. Providing remedial work.</td>
<td>483</td>
<td>3.20</td>
<td>1.113</td>
</tr>
<tr>
<td>58. Providing enrichment work.</td>
<td>480</td>
<td>3.20</td>
<td>1.161</td>
</tr>
<tr>
<td>59. Keeping records.</td>
<td>484</td>
<td>3.40</td>
<td>1.308</td>
</tr>
</tbody>
</table>
seventy-three (33.4%) teachers agreed that their training was sufficient to implement CA. One hundred and fifty (28.8%) slightly agreed to the same statement. One hundred and seventy-five (33.6%) disagreed. Four percent of the teachers did not make any comments on the same issue. (See Appendix A.)

**Testing Hypotheses**

Hypothesis 1 stated, there is no significant relationship between level of education and implementation. The means and standard deviations of the four groups: Primary Teachers’ Certificate and lower, Primary Teachers’ Diploma (PTD), Secondary Teachers’ Certificate or Secondary Teachers’ Diploma (Secondary Certification); and Bachelor of Arts, Bachelor of Education, or Bachelor of Science (Bachelors) are shown in Table 12. The Univariate Analysis of Variance (ANOVA) examined the between-subjects effects of education on degree of implementation. The results yielded an $F$ statistic of 4.508 and a $p$ value of .004 (see Table 13), which was clearly less than .05. This shows a significant relationship between level of education and implementation. In order to examine where the mean differences existed, pair-wise comparisons were used, and are shown in Table 14.

Table 14 shows that the primary teachers’ certificate (PTC) and lower report that they are implementing the Continuous Assessment Program at a higher degree than the other groups (PTD, STC/STD, or Bachelors). No other differences were significant. The $p$ value for mean differences was .002 showing that the difference was significant. This finding supports the hypothesis that there is a significant relationship between level of
education and implementation. This means that the null hypothesis, there is no relationship between level of education and implementation, was rejected.

A sub-hypothesis, there is no significant relationship between number of times remedial work is given in a week and level of education, was also tested. Table 15 shows the Chi-Square test that yielded an $\chi^2 = 13.89$, with $df = 6$ and a $p = .031$. This $p$ value was less than .05. Table 15 shows that the Primary Teachers’ Certificate holders are giving remedial work in a week significantly higher than the rest of the groups. It can be concluded that there is a significant relationship between level of education and the number of times remedial work is given in a week. The sub null hypothesis was rejected.
### Table 12

**Means and Standard Deviations of Implementation by Level of Education**

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>PTC</th>
<th>PTD</th>
<th>Secondary</th>
<th>Bachelors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>N</td>
</tr>
<tr>
<td>7. I use NCC objectives as written in the NCC books</td>
<td>297</td>
<td>4.08</td>
<td>1.014</td>
<td>165</td>
</tr>
<tr>
<td>8. I write my own objectives from NCC books</td>
<td>297</td>
<td>2.89</td>
<td>1.282</td>
<td>162</td>
</tr>
<tr>
<td>9. I understand the objectives from NCC books</td>
<td>300</td>
<td>4.00</td>
<td>.983</td>
<td>165</td>
</tr>
<tr>
<td>10. I give CRT developed by NCC</td>
<td>272</td>
<td>3.46</td>
<td>1.177</td>
<td>156</td>
</tr>
<tr>
<td>11. I develop CRT for each lesson</td>
<td>264</td>
<td>3.40</td>
<td>1.169</td>
<td>153</td>
</tr>
<tr>
<td>12. I give CRT for each unit</td>
<td>266</td>
<td>3.62</td>
<td>1.186</td>
<td>156</td>
</tr>
<tr>
<td>13. I give remedial work</td>
<td>298</td>
<td>3.72</td>
<td>1.110</td>
<td>163</td>
</tr>
<tr>
<td>14. I have time to help non-masters</td>
<td>301</td>
<td>3.39</td>
<td>1.205</td>
<td>163</td>
</tr>
<tr>
<td>15. I prepare my own remedial work</td>
<td>299</td>
<td>3.41</td>
<td>1.139</td>
<td>162</td>
</tr>
<tr>
<td>16. I depend on remedial activities from NCC</td>
<td>297</td>
<td>2.81</td>
<td>1.196</td>
<td>162</td>
</tr>
<tr>
<td>17. I prepare remedial work with other teachers</td>
<td>295</td>
<td>2.21</td>
<td>1.217</td>
<td>163</td>
</tr>
<tr>
<td>18. I give enrichment work</td>
<td>295</td>
<td>3.64</td>
<td>1.134</td>
<td>165</td>
</tr>
<tr>
<td>19. I give enrichment work only when necessary</td>
<td>286</td>
<td>3.67</td>
<td>1.035</td>
<td>162</td>
</tr>
<tr>
<td>20. I prepare enrichment activities before I teach a lesson</td>
<td>287</td>
<td>3.07</td>
<td>1.376</td>
<td>162</td>
</tr>
<tr>
<td>21. I have time to prepare enrichment work</td>
<td>294</td>
<td>2.98</td>
<td>1.266</td>
<td>164</td>
</tr>
<tr>
<td>22. I keep accurate records of my pupils' progress</td>
<td>294</td>
<td>4.12</td>
<td>1.142</td>
<td>162</td>
</tr>
<tr>
<td>Scale</td>
<td>212</td>
<td>51.75</td>
<td>9.38</td>
<td>137</td>
</tr>
</tbody>
</table>

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Table 13

*Univariate Analysis of Variance of Tests Between-Subjects Effects of Degree of Implementation by Education*

<table>
<thead>
<tr>
<th>Source Type</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUCATIONAL LEVEL (between)</td>
<td>1082.375</td>
<td>3</td>
<td>360.79</td>
<td>4.51</td>
<td>.004</td>
</tr>
<tr>
<td>Error</td>
<td>29770.409</td>
<td>372</td>
<td>80.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected total</td>
<td>30852.785</td>
<td>375</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 14

*Means, Standard Deviations, and Mean Differences for Degree of Implementation by Level of Education: Pair-wise Comparisons*

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PTC</td>
</tr>
<tr>
<td>PTC</td>
<td>212</td>
<td>51.75</td>
<td>9.38</td>
<td>-----</td>
</tr>
<tr>
<td>PTD</td>
<td>137</td>
<td>48.22</td>
<td>8.42</td>
<td>-----</td>
</tr>
<tr>
<td>SEC</td>
<td>15</td>
<td>49.13</td>
<td>9.14</td>
<td>-----</td>
</tr>
<tr>
<td>BACH</td>
<td>12</td>
<td>49.00</td>
<td>6.02</td>
<td>-----</td>
</tr>
</tbody>
</table>
Hypothesis 2 stated, there is no relationship between teaching experience in Continuous Assessment and implementation. The means and standard deviations of the four groups (less than 2 years, 2-4 years, 5-7 years, and more than 7 years) for teaching experience are shown in Table 16. The ANOVA examined the between-subjects effects of experience in CA on degree of implementation. The results yielded an $F$ statistic value of 1.382 and a $p$ value of .248. This $p$ value is much greater than .05, showing no relationship between the variables of experience in CA and implementation. (see table 17.)

Table 15

*Crosstab Level of Education by How Many Times Remedial Work Is Given in a Week*

<table>
<thead>
<tr>
<th>Groups</th>
<th>Number of Times Remedial Work is Given in a Week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>PTC</td>
<td>110 (37.9)</td>
</tr>
<tr>
<td>PTD</td>
<td>66 (41.0)</td>
</tr>
<tr>
<td>SEC</td>
<td>5 (26.3)</td>
</tr>
<tr>
<td>BA</td>
<td>10 (50.0)</td>
</tr>
</tbody>
</table>

*Note. $\chi^2 = 13.89; df = 6; p=0.031."

The null hypothesis, There is no relationship between experience in CA and implementation, has been retained.

Hypothesis 3 stated, there is no significant relationship between teachers' attitude of the Continuous Assessment Program and implementation. To test for the strength of the relationship between teachers' attitude and implementationPearson's
correlation coefficient ($r$) was determined with $r=0.585\ (p<0.001)$. There is a significant relationship between teachers' attitude toward the Continuous Assessment Program and implementation.

The null hypothesis, there is no relationship between teachers' attitude and implementation, was rejected. The positive relationship implies that those who like the Continuous Assessment Program are more likely to implement it to a higher degree than those who do not.

Hypothesis 4 stated, there is no relationship between teachers' perceived support of the Ministry of Education (MoE) and the degree of implementation. From Table 18 the Pearson correlation coefficient for perceived MoE support with implementation was .398 and the $p$ value yielded was .000. This $p$ value (.000) was less than .01. It can be concluded, therefore that there is a significant relationship between perceived support of the MoE and implementation. Therefore, the null hypothesis, There is no relationship between MoE support and implementation, has been rejected. The implication is that teachers who feel supported by the MoE are more likely to implement the Continuous Assessment Program successfully.

Hypothesis 5 stated, there is no relationship between the teachers' perceived adequacy of initial and ongoing training in the Continuous Assessment Program and the degree of implementation. Pearson coefficient correlation was used to determine the relationship between the variables in hypothesis 5. The test for strength of the relationship yielded a Pearson correlation coefficient of .514 and a $p$ value of .000. (See Table 18.) It can be concluded, therefore, that there is a significant relationship between perceived adequacy of initial and ongoing training and implementation. The null
Table 16

Means and Standard Deviations of Work Experience and Implementation

<table>
<thead>
<tr>
<th>Variable</th>
<th>&lt;2</th>
<th></th>
<th></th>
<th>&lt;2</th>
<th></th>
<th></th>
<th>&lt;2</th>
<th></th>
<th></th>
<th>&lt;2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I use NCC objectives as written in the NCC books</td>
<td>64</td>
<td>3.91</td>
<td>1.178</td>
<td>142</td>
<td>3.83</td>
<td>1.092</td>
<td>119</td>
<td>4.14</td>
<td>.895</td>
<td>173</td>
<td>4.04</td>
<td>1.019</td>
</tr>
<tr>
<td>I write my own objectives from NCC books</td>
<td>63</td>
<td>2.97</td>
<td>1.270</td>
<td>142</td>
<td>2.89</td>
<td>1.171</td>
<td>117</td>
<td>2.84</td>
<td>1.144</td>
<td>172</td>
<td>2.99</td>
<td>1.242</td>
</tr>
<tr>
<td>I understand the objectives from NCC books</td>
<td>62</td>
<td>3.94</td>
<td>1.084</td>
<td>145</td>
<td>3.86</td>
<td>1.004</td>
<td>120</td>
<td>4.10</td>
<td>.938</td>
<td>175</td>
<td>4.01</td>
<td>.962</td>
</tr>
<tr>
<td>I give CRT developed by NCC</td>
<td>56</td>
<td>3.48</td>
<td>1.265</td>
<td>134</td>
<td>3.22</td>
<td>1.101</td>
<td>113</td>
<td>3.29</td>
<td>1.125</td>
<td>158</td>
<td>3.53</td>
<td>1.121</td>
</tr>
<tr>
<td>I develop CRT for each lesson</td>
<td>55</td>
<td>3.33</td>
<td>1.233</td>
<td>127</td>
<td>3.24</td>
<td>1.111</td>
<td>111</td>
<td>3.45</td>
<td>1.134</td>
<td>156</td>
<td>3.37</td>
<td>1.153</td>
</tr>
<tr>
<td>I give CRT for each unit</td>
<td>52</td>
<td>3.37</td>
<td>1.221</td>
<td>135</td>
<td>3.39</td>
<td>1.146</td>
<td>112</td>
<td>3.13</td>
<td>1.090</td>
<td>158</td>
<td>3.60</td>
<td>1.140</td>
</tr>
<tr>
<td>I give remedial work</td>
<td>63</td>
<td>3.56</td>
<td>1.074</td>
<td>143</td>
<td>3.64</td>
<td>1.011</td>
<td>120</td>
<td>3.63</td>
<td>1.053</td>
<td>173</td>
<td>3.72</td>
<td>1.237</td>
</tr>
<tr>
<td>I have time to help non-masters</td>
<td>63</td>
<td>3.22</td>
<td>1.197</td>
<td>144</td>
<td>3.12</td>
<td>1.164</td>
<td>121</td>
<td>3.11</td>
<td>1.094</td>
<td>173</td>
<td>3.43</td>
<td>1.221</td>
</tr>
<tr>
<td>I prepare my own remedial work</td>
<td>62</td>
<td>3.47</td>
<td>1.112</td>
<td>144</td>
<td>3.28</td>
<td>1.131</td>
<td>118</td>
<td>3.39</td>
<td>1.054</td>
<td>173</td>
<td>3.35</td>
<td>1.185</td>
</tr>
<tr>
<td>I depend on remedial activities from NCC</td>
<td>62</td>
<td>2.60</td>
<td>1.207</td>
<td>142</td>
<td>2.66</td>
<td>1.135</td>
<td>119</td>
<td>2.78</td>
<td>1.129</td>
<td>172</td>
<td>2.83</td>
<td>1.177</td>
</tr>
<tr>
<td>I prepare remedial work with other teachers</td>
<td>63</td>
<td>1.98</td>
<td>1.157</td>
<td>140</td>
<td>2.10</td>
<td>1.095</td>
<td>119</td>
<td>2.10</td>
<td>1.196</td>
<td>175</td>
<td>2.21</td>
<td>1.224</td>
</tr>
<tr>
<td>I give enrichment work</td>
<td>63</td>
<td>3.63</td>
<td>1.140</td>
<td>144</td>
<td>3.63</td>
<td>1.056</td>
<td>120</td>
<td>3.49</td>
<td>1.108</td>
<td>172</td>
<td>3.66</td>
<td>1.176</td>
</tr>
<tr>
<td>I give enrichment work only when necessary</td>
<td>60</td>
<td>3.70</td>
<td>1.062</td>
<td>139</td>
<td>3.58</td>
<td>992</td>
<td>117</td>
<td>3.62</td>
<td>1.128</td>
<td>170</td>
<td>3.52</td>
<td>1.089</td>
</tr>
<tr>
<td>I prepare enrichment activities before I teach a lesson</td>
<td>61</td>
<td>2.98</td>
<td>1.384</td>
<td>143</td>
<td>2.92</td>
<td>1.327</td>
<td>114</td>
<td>2.92</td>
<td>1.311</td>
<td>168</td>
<td>2.88</td>
<td>1.447</td>
</tr>
<tr>
<td>I have time to prepare enrichment work</td>
<td>62</td>
<td>3.08</td>
<td>1.346</td>
<td>142</td>
<td>2.80</td>
<td>1.267</td>
<td>119</td>
<td>2.75</td>
<td>1.173</td>
<td>172</td>
<td>2.98</td>
<td>1.307</td>
</tr>
<tr>
<td>I keep accurate records of my pupils' progress</td>
<td>60</td>
<td>4.13</td>
<td>1.127</td>
<td>142</td>
<td>4.04</td>
<td>1.151</td>
<td>118</td>
<td>4.08</td>
<td>1.185</td>
<td>173</td>
<td>4.01</td>
<td>1.174</td>
</tr>
<tr>
<td>Scale</td>
<td>44</td>
<td>50.95</td>
<td>8.52</td>
<td>109</td>
<td>48.89</td>
<td>8.24</td>
<td>92</td>
<td>51.02</td>
<td>8.23</td>
<td>129</td>
<td>50.81</td>
<td>9.60</td>
</tr>
</tbody>
</table>
Table 17

Test of Between-Subjects Effects  
Dependent Variable: Degree of Implementation

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>f</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exeper</td>
<td>320.86</td>
<td>3</td>
<td>106.955</td>
<td>1.382</td>
<td>.248</td>
</tr>
<tr>
<td>Error</td>
<td>28798.103</td>
<td>372</td>
<td>77.414</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>980956.00</td>
<td>376</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected total</td>
<td>29118.968</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 18

Means, Standard Deviations, and Coefficient Correlations of Implementation and Attitude Toward the Continuous Assessment Program, Perceived Support From the MOE, Perceived Adequacy of Training, Perceived Role of the Head-Teacher

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>r</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Toward Continuous Assessment Program</td>
<td>438</td>
<td>35.4909</td>
<td>12.75607</td>
<td>.586</td>
<td>.000</td>
</tr>
<tr>
<td>Perceived Support From Ministry of Ed.</td>
<td>473</td>
<td>18.1755</td>
<td>6.56171</td>
<td>.398</td>
<td>.000</td>
</tr>
<tr>
<td>Perceived Adequacy of Training</td>
<td>427</td>
<td>36.8735</td>
<td>8.96225</td>
<td>.514</td>
<td>.000</td>
</tr>
<tr>
<td>Perceived Role of Head-Teacher</td>
<td>488</td>
<td>9.3340</td>
<td>3.61168</td>
<td>.473</td>
<td>.000</td>
</tr>
</tbody>
</table>
hypothesis, There is no relationship between perceived adequacy of initial and ongoing training, has been rejected. This means, those who perceive adequate initial and ongoing training in CA also report more successful implementation of the CAP.

Hypothesis 6 stated there is no relationship between the teachers’ perceived role of the head teacher in the Continuous Assessment Program and degree of implementation. The test yielded a correlation coefficient $r$ of .473 and a $p$ value of .000 (see Table 18), which suggests that there is a positive relationship between perceived role of the head–teacher in the Continuous Assessment Program and the degree of implementation. The null hypothesis, there is no relationship between perceived role of the head teacher and implementation, was rejected. It can be said, therefore that the more the teachers view the head teacher as supportive in CA, the more likely they are to implement the program successfully.

Hypothesis 7 stated, there is no linear relationship between the variables of (a) educational attainment, (b) work experience in CA, (c) teachers’ attitude toward the Continuous Assessment, (d) teachers’ perceived support of the Ministry of Education, (e) perceived adequacy of initial and ongoing training, (f) teachers perceived role of the head-teacher in the Continuous Assessment Program and implementation.

Table 19 shows the means and standard deviations for degree of implementation and six predictors (teaching experience, attitude toward CAP, perceived support from Ministry of Education, perceived adequacy of training, perceived role of head-teacher, and years of education) used in the regression model. Table 20 shows a matrix of the intercorrelations among the seven variables. Moderate correlations between degree of implementation and the following predictors were found for: attitude toward CAP
perceived support from Ministry of Education (0.396), perceived adequacy of training (0.517), and perceived role of the head-teacher (0.483). A very small negative correlation, though statistically significant (-0.128), between degree of implementation and years of education was found. There was no statistically significant correlation between degree of implementation and teaching experience.

A direct-method multiple regression analysis was conducted to examine the relationship between degree of implementation and the linear combination of the six predictor variables. Table 21 shows the result of the regression analysis. As a set the six predictors explained 39.5% of the variance in degree of implementation. This was statistically significant at the 0.05 level ($F_{(6,280)}=30.46, p<0.001$). However, only the attitude toward CAP ($r=3.65, p<0.001$) and perceived adequacy of training ($r=3.96, p<0.001$) were significant predictors, with attitude toward CAP being the strongest predictor ($\beta=0.332$).

Part II of the questionnaire consisted of open-ended questions in which the subjects were expected to write in any response they wanted. In this section specific individual responses were generated. The responses, therefore, accurately indicate each subject's feelings or beliefs. These responses are summarized in the section that follows.
Table 19

**Means and Standard Deviations for Degree of Implementation and Predictors**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of implementation</td>
<td>50.6098</td>
<td>8.69657</td>
<td>287</td>
</tr>
<tr>
<td>Teaching experience</td>
<td>2.82</td>
<td>1.002</td>
<td>287</td>
</tr>
<tr>
<td>Attitude toward CAP</td>
<td>36.6202</td>
<td>12.72814</td>
<td>287</td>
</tr>
<tr>
<td>Perceived support from MoE</td>
<td>18.8084</td>
<td>6.24681</td>
<td>287</td>
</tr>
<tr>
<td>Perceived adequacy of training</td>
<td>37.7317</td>
<td>8.51866</td>
<td>287</td>
</tr>
<tr>
<td>Perceived role of head-teacher</td>
<td>9.5540</td>
<td>3.55325</td>
<td>287</td>
</tr>
<tr>
<td>Years of education</td>
<td>14.4808</td>
<td>.56607</td>
<td>287</td>
</tr>
</tbody>
</table>

Table 20

**Matrix Showing the Intercorrelations Among the Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Degree of implementation</td>
<td>1.000</td>
<td>.013</td>
<td>.575</td>
<td>.396</td>
<td>.517</td>
<td>.483</td>
<td>.128</td>
</tr>
<tr>
<td>2. Teaching experience</td>
<td>.013</td>
<td>1.000</td>
<td>.187</td>
<td>.076</td>
<td>.009</td>
<td>.148</td>
<td>-.336</td>
</tr>
<tr>
<td>3. Attitude toward CAP</td>
<td>.575</td>
<td>.187</td>
<td>1.000</td>
<td>.470</td>
<td>.568</td>
<td>.808</td>
<td>-.242</td>
</tr>
<tr>
<td>4. Perceived support of MoE</td>
<td>.396</td>
<td>.076</td>
<td>.470</td>
<td>1.000</td>
<td>.595</td>
<td>.363</td>
<td>-.190</td>
</tr>
<tr>
<td>5. Perceived adequacy of training</td>
<td>.517</td>
<td>.009</td>
<td>.568</td>
<td>.595</td>
<td>1.000</td>
<td>.396</td>
<td>-.108</td>
</tr>
<tr>
<td>6. Perceived role of head-teacher</td>
<td>.483</td>
<td>.148</td>
<td>.808</td>
<td>.363</td>
<td>.396</td>
<td>1.000</td>
<td>-.182</td>
</tr>
<tr>
<td>7. Years of education</td>
<td>.128</td>
<td>-.336</td>
<td>-.242</td>
<td>-.190</td>
<td>-.108</td>
<td>-.182</td>
<td>1.000</td>
</tr>
</tbody>
</table>
Table 21

Regression Coefficients of Teaching Experience in CA, Attitude Toward the Continuous Assessment Program, Perceived Adequacy of Training, Perceived Role of Head-Teacher, Years of Education (Education Level), and the Degree of Implementation

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(b)</td>
<td>(SE)</td>
</tr>
<tr>
<td>(Constant)</td>
<td>34.253</td>
<td>12.076</td>
</tr>
<tr>
<td>Teaching experience</td>
<td>.662</td>
<td>.434</td>
</tr>
<tr>
<td>Attitude toward Continuous Assessment Program</td>
<td>.227</td>
<td>.062</td>
</tr>
<tr>
<td>Perceived support from Ministry of Education</td>
<td>.074</td>
<td>.083</td>
</tr>
<tr>
<td>Perceived adequacy of training</td>
<td>.260</td>
<td>.066</td>
</tr>
<tr>
<td>Perceived role of head-teacher</td>
<td>.253</td>
<td>.195</td>
</tr>
<tr>
<td>Years of education</td>
<td>-0.257</td>
<td>.778</td>
</tr>
</tbody>
</table>

Note. \(R^2=0.395\), \(F_{(6,280)}=30.46, p=0.000\).
General Impression of CA

Four hundred and ninety-five (95%) teachers responded to question 1. Of the 520 teachers who responded to this item, 240 teachers, which is 40% of the group, said that the Continuous Assessment Program was a good idea for Swaziland because it is systematic, objective and an ongoing process of finding out how well a student has learned a set of objectives. However, they hastened to add that they were facing major problems because of the large numbers of children they had to not only teach, but also give remedial activities, enrichment, and also keep proper records. These voices are representative:

Respondent #512: Basically CA helps the teacher to be able to assess the child’s progress through learned set of objectives. It also makes it easier for the parent to help his/her child at home. Sometimes I cannot finish doing remedial work because of the big numbers that I have in class. . . . CA generally is a good program . . . except that . . . we have large numbers in class, e.g. I have sixty pupils. There is not much time for remediation if I have to chase the syllabus at the same time.

CA is a good method which can help us in the long run, but it still has a lot of problems which need to be attended. . . . Numbers are large in the classes. CA is a very good tool to be used but the only problem is that it needs a teacher to be well prepared and be a fully dedicated teacher with love in teaching, in order to follow all steps in CA without fail. . . . The biggest problem is the class size, for example with me, my class has 64 pupils. Time becomes not enough for all necessary steps for CA such as teaching, remediation and enrichment and finally teaching again. . . . Government must reduce number of pupils per class.

Another group of teachers said that the Continuous Assessment Program was not a good idea for Swaziland. Of the 520 teachers, 185 (36%) said CA was not a good idea for Swaziland. Seventy (13%) teachers said CA was not challenging because it enabled students who did not really master their content to proceed to other grades. Second, the Continuous Assessment Program has been forced on the teachers.

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Respondent #163: CA, as I perceive it, is here to destroy the quality of education we had before. . . . I do not expect anyone to monitor it because it is a non-starter. It is forced down the throats of teachers. . . . Non-masters are allowed to proceed to the next class and will end up having pupils who will not make it to university or tertiary education.

Of this same group, 48 teachers, representing 9% of the questionnaires, said the Continuous Assessment Program should be discontinued. This group argued that teachers have been teaching any way before the introduction of the Continuous Assessment Program. “Teachers are better off without the CA, after all they have been teaching in the past without CA”.

In this same group, 6 teachers, which is 1% of the group responding to this item, said CA was “nothing new.” Three teachers, which is 0.5% of those who responded, said they did not do CA, because they just were not interested. “CA is no good. It does not help the pupils. It should be dumped. . . . I have no problems I do not do it at all.”

Problems Encountered by Teachers in Doing CA

Four hundred and fifty (46%) teachers responded to these questions. Teachers reported 10 major problems. Teachers were also quick to suggest what they perceived as a solution to their problems. A summary of these problems and their suggested solutions is provided. As indicated in the summary, the teachers reported 10 major problems. These are presented to some detail in the section that follows.

Large Class Sizes

Three hundred (58%) teachers said that their class sizes were too large for a proper implementation of the Continuous Assessment Program. The teachers’ argument seems to be that because they have to now do remediation and in some cases enrichment,
and in addition keep accurate records, they find themselves doing more re-teaching and record keeping than teaching. Further, they point out that a lot of time is needed for preparation of a true “CA” lesson. Some representative voices state that “numbers are very high in classrooms and individual attention is impossible” (Respondent #389); “The number of the pupils is mostly large in rural areas thus making it difficult to conduct the lesson properly” (Respondent #202); “Number of pupils in class makes everything impossible in as far as the implementations of CA are concerned” (Respondent #385).

The solution suggested by teachers was either to reduce class sizes or hire more teachers. Others called upon the government to build more schools. “CA can be improved by reducing the number of pupils in a classroom” (Respondent #234); “The government is supposed to hire more teachers to reduce the number in class. Numbers are too big to be manageable” (Respondent #283).

*Respondent #282:* CA is good for developed countries. Swaziland schools, more especially rural schools, are not ready for this exercise. There is a great need for personnel. . . . The number of pupils in classes is too much to carry this exercise. CA needs government to provide schools with more teachers. You cannot teach a class with 60 pupils--there is no time for remedial work. . . . Again government must provide computers for record keeping.

**Too Much Paperwork**

There were 180 teachers, representing 35% of the group, who said the Continuous Assessment Program had too many records to be kept. Among these they pointed out the daily progress record of each lesson taught, the unit or term tests, the remediation or enrichment records of masters and non-masters, and the detailed end-of-term report. The major concern came from the end-of-term report where they had to comment “by objective” in a given subject rather than by subject.
### Table 22

**Problems Encountered During CA Implementation**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Number of Teachers Reporting</th>
<th>%</th>
<th>Suggested Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Classes are too large.</td>
<td>300</td>
<td>58</td>
<td>Reduce number of students per class, hire more teachers, build schools</td>
</tr>
<tr>
<td>2. There is too much paperwork caused by too many records.</td>
<td>180</td>
<td>35</td>
<td>Conduct workshops with teachers to reduce on records</td>
</tr>
<tr>
<td>3. Instructional materials are not always available in schools.</td>
<td>65</td>
<td>13</td>
<td>Ministry of Education should deliver materials to schools</td>
</tr>
<tr>
<td>4. There is little time to do all the CA work.</td>
<td>67</td>
<td>13</td>
<td>Consider reducing unnecessary records, reduce syllabuses</td>
</tr>
<tr>
<td>5. Examination questions are not always congruent with what teachers have covered for a particular term. Examinations need to be proofread for mistakes.</td>
<td>90</td>
<td>17</td>
<td>Either let teachers set their own test or involve them when setting tests also Simple – proof read all papers for errors</td>
</tr>
<tr>
<td>6. Tests arrive late in schools.</td>
<td>20</td>
<td>4</td>
<td>Ministry of Education needs to arrange for and deliver tests on time</td>
</tr>
<tr>
<td>7. There are not enough follow up visits by inspectors, INSET</td>
<td>100</td>
<td>19</td>
<td>Hire more inspectors Let them visit schools Decentralize INSET</td>
</tr>
<tr>
<td>8. Some teachers have not yet been trained in CA.</td>
<td>4</td>
<td>.8</td>
<td>Training should be continuous – all teachers need it</td>
</tr>
<tr>
<td>9. CA leaders do not seem to &quot;listen&quot; to teachers' concerns about CA.</td>
<td>10</td>
<td>2</td>
<td>Special workshops should be conducted just to hear teachers' views/progress in the Continuous Assessment Program Listen to the teachers' views</td>
</tr>
<tr>
<td>10. Some schools do not have equipment, such as, photocopiers, typewriters, and computers.</td>
<td>100</td>
<td>19</td>
<td>Ministry of Education should equip schools with sufficient tools such as named here for a successful implementation of the Continuous Assessment Program</td>
</tr>
</tbody>
</table>
“Employ clerks to do the paperwork such as recording marks... Provide computers for good record keeping” (Respondent #282); “Commenting on every objective covered is strenuous for the teacher... There should be general comment per subject, not a comment per objective” (Respondent #234); “CA is all right, except the recording and commenting by objective... This is just a waste of time. You tend to do that only instead of teaching thoroughly... More time is wasted recording and doing remedial than teaching” (Respondent #108).

Unavailability of Instructional Materials

Of the group that responded, 65 teachers, representing 13%, said that they did not have the necessary instructional materials in school. “Working materials are not enough in schools to implement CA... There should be enough materials such as Cuisenaire rods, counters, and others” (Respondent #282); “CA is a good system of teaching but we do not have enough teaching materials for its implementation to be a success” (Respondent #235). The same teachers pointed out that the Ministry of Education should deliver all instructional materials to those schools that cannot collect them from district centers either because of long distances or poor means of transport. The solution suggested by this group of teachers was that NCC, INSET, and inspectors (the CA leaders) should conduct workshops together with teachers and involve the teachers in determining records that should be kept in schools. This teacher represents many others in this group:

_Respondent #308_: Proper recording of pupils performance is needed but there should be regional if not national workshops on CA where teachers will be allowed to get involved in the program and let them prepare the whole thing. Let the Ministry of Education only guide and make follow ups to assist teachers.
Time to Do CA

Sixty-seven teachers, representing 13% of the total sample, were concerned about where to get the time to do all that the Continuous Assessment Program requires. For example, one teacher who represents this group said they need a lot of time, not only to prepare in the Continuous Assessment Program, but also to teach and re-teach. These teachers represent this group: “The heavy workload simply comes with this program”; “I find myself working overtime because there is a lot of work to do in CA. Rather than teaching, e.g., testing after every lesson and then recording”; “CA needs our extra time as teachers”; “CA takes a lot of time”; “There is too much work in this CA.”

Although there does not seem to be one solution, teachers repeatedly suggested that if the numbers in their classes were reduced, they would have time to do CA requirements.

Respondent #30: The problem is to accommodate the tremendous number of pupils as far as marking scripts, recording, assessing and allowing time for remedial articles for non-masters. . . . Reduce the number of pupils per class. . . . Provide computers to keep records of individual pupils.

One teacher stated that when she is “busy with remediation the enrichment group starts to play or going outside now and then no matter how much work they have” (Respondent #443). This particular teacher suggested that parents should also help at home with remediation.

Unit and Term Examinations

Ninety teachers representing 17% of the total group were concerned about the term tests (others called them unit tests) that are set by the CA unit. Their concerns can
be categorized as that of congruence with NCC objectives or haphazardness in the setting.

**Congruence:** The teachers that reported this problem said that the tests are set ahead of where the teacher is at in his/her teaching, making it impossible for all the children to pass the test. This group argued that this would continue to happen because, although the papers are set centrally, there is no provision for the CA unit to go to schools and inquire of where teachers are in the syllabus.

**Haphazardness:** The group reporting this said that this problem seems to be caused by the carelessness of the examination setters not double-checking their work. This group said that some questions do not even have answers on the multiple-choice section. Others are stapled upside down.

Respondent #128 who represents this group, said:

There is a problem I encounter because CA is sometimes preparing test papers, which don’t have answers, sometimes the answers are irrelevant, and they also set questions, which you as teacher have not taught. I would ask the CA writers to always please check on their CA test to correct mistakes. . . . CA people should invite teachers to workshops to find out how far they have gone with their teaching. . . . so that they can discuss it and the CA people would know exactly where to start and set their examination.

Another respondent (#443) wrote:

When setting questions for that grade they should set questions for that term’s work not the work the children have not done and I would suggest that they also involve teachers when setting questions who are more involved with the pupils than the CA officials or NCC staff.

Respondent #449 said:

The people who set CA tests depend on assumptions. . . . They do not consider that pupils may not have mastered the content. . . . More often than not pupils are tested on content which is not yet taught and this results to failure. It’s impossible to teach, enrich, remediate and test three times the same content to the same pupils and finish the syllabus in time.
This problem's solution was stated very clearly: Involve teachers when setting end-of-term tests or alternatively make a survey as to how far the teachers have gone in their teaching before setting the term tests. Respondent #231 said, "Those imposers of CA must check its success and failures."

Tests Arriving Late in Schools

In addition to these problems, 20 teachers, representing 4% of the total sample, said tests arrive late in schools. These seem to be from the schools that are far away from the district resource centers. The solution that this group offered was for the Ministry of Education to deliver all instructional materials to schools rather than schools fetching these from the centers. Rural schools that reported this problem were in agreement for this solution.

Follow-up Visits From INSET or Inspectors or Both

One hundred teachers, 19% of the group, responded to question 2. These teachers said that after the CA leaders, NCC, INSET and inspectors of schools have conducted initial workshops, there are no follow-up visits in many schools. This creates difficulty for those teachers who want to implement the Continuous Assessment Program correctly. Other teachers pointed out that the CA leaders should not come to schools on a faultfinding mission, but to help teachers implement the Continuous Assessment Program properly. "NCC, INSET, inspectors must not come to schools on faultfinding, but must come as helpers. They must visit schools regularly not to use remote controls when they organize workshops, they must search and have convincing answers to teachers' questions." The other group within this category put it in this manner, "I think CA would
be a good system if it had the best support from policy makers . . . that is, proper follow-up in schools by INSET staff and inspectors” (Respondent #150). This group of teachers called upon the Ministry of Education to hire more inspectors who will go around helping teachers on CA issues. The teachers also suggested that INSET should be decentralized. By doing this many schools will either get to INSET quicker or INSET would get to visit nearly all schools each term.

Not Having Been Trained CA

Of the 520 teachers who responded to Question 60, 4 teachers, which is .08%, said that they had not been trained in CA. Of this group some reported that they did CA by watching other teachers and the others did just not do CA. The other teacher representing the group that did not do CA simply said, “I was not trained in CA and I do not do it”

Leaders Who Do Not Take Teachers’ Concerns Seriously in the Continuous Assessment Program

Ten teachers (2% of the questionnaires) said that the government, the CA leaders, or those in power do not listen to their complaints, input, problems, or concerns in the Continuous Assessment Program. The quotes that follow represent this group’s concerns: “Teachers are also professionals like the people who introduced the Continuous Assessment Program so their suggestions, recommendations and criticisms should be listened to and taken in to consideration” (Respondent #464).

Respondent # 308: The teachers need to be involved in the CA because they are the people who are teaching the students, they know what is good for the children. As it is I think it will be very difficult to . . . implement the Continuous Assessment Program because we teachers are taken as empty slates. The trainers or inspectors should not impose everything on teachers just because
they have powers to do that, but they need to involve the teachers to find suitable ways of implementing the CA in schools and how to monitor it. The problem is those teachers' suggestions and comments are never considered by the ministry of the day.

The solutions suggested by this group of teachers was for CA leaders (Ministry of Education, NCC, inspectors, INSET) to take seriously all teachers' concerns, problems, and contributions in the Continuous Assessment Program and to find a way of addressing them "before things get out of hand."

This particular teacher (Respondent #308) said, In short the CA program is an excellent idea, provided the teacher gets involved and is allowed to lead the way in the implementation of the Continuous Assessment Program. As of now . . . CA is dictated to the teacher, teachers suggestions and comments are never considered. . . . Teachers must be allowed to bring their suggestions to regional and national workshops.

Schools Do Not Have Equipment Needed to Implement the Continuous Assessment Program

Of the 520 teachers who responded to question 2, One hundred teachers, which is 19% of the group, stated quite emphatically that in order to properly implement the Continuous Assessment Program, schools will need to be equipped with photocopiers, at least a computer in each school, electricity, and simple basic tools like paper, crayons, pencils, etc. While some schools, particularly urban schools, might have all these tools, other schools especially in remote areas do not have tools with which to implement the Continuous Assessment Program. These voices were repeatedly heard in this section: "There are no photocopying machines, no typewriters, no computers to ease the burden of doing CA. . . . The government must make sure that the equipment for implementing CA thoroughly is available, this includes electricity" (Respondent #243); "CA has too much work with no adequate materials to be affectively carried out. . . . If the government
can give us all materials maybe that can be of help. . . . We don't have photocopying machines. . . . Try to deliver everything containing CA to schools” (Respondent #203); “CA is good. The implementation is poor, the organization is poor. Schools were not prepared to keep the exercise on a long-term basis--some schools do not have a storeroom for keeping CA tests” (Respondent #212); “More classrooms are needed . . . furniture and other facilities” (Respondent #308).

Comments on the Monitoring and Implementation of CA

Four hundred and seventy-three (91%) teachers responded to this question. Teachers were almost unanimous on the suggestion that inspectors and INSET should conduct visits to schools, specifically to help teachers implement the Continuous Assessment Program well. However, as in many responses, they were quick to add that they (teachers) are professionals just like the CA leaders; therefore they would like to be “listened” to. Teachers emphasized that they operate in different situations. Talking about the initiators, one teacher wrote, “They should also check on the conditions per school . . . so that they make suggestions that are preferable for the condition one lives in” (Respondent #235). Some teachers suggested that “the Ministry of Education should not force CA on teachers but it should educate them on the importance of the exercise and together work out how the problems can be solved . . . not forcing them to like the exercise” (Respondent #389). Similarly, respondent #338 represents many others in this group:

If the INSET staff and inspectors could be active to go about preaching about the Continuous Assessment Program . . . some of them are totally against it. They go about telling teachers of a dying CA, which I think has contributed to the downfall of the program.
Sixty teachers, which is 12%, referred to “those who initiated it are not doing their work . . . not enough workshops on the exercise. . . . Moreover they are not doing anything to improve it.” This group called upon the CA leaders to fix what they had introduced or just do away with it.

Summary

It is clear from the findings in this chapter that all the components of the Continuous Assessment Program (using clearly stated objectives, giving of criterion referenced test, providing enrichment activities, and keeping proper records) are being partially implemented. The data have also suggested that the primary-school certificate holders are implementing the Continuous Assessment Program more than their highly qualified colleagues. Teachers’ attitude toward the Continuous Assessment Program can be said to be that of “slightly liking it.” Teachers in this study do not perceive the Ministry of Education (NCC, INSET, Inspectors) as supportive. In addition, teachers in this study have identified the problems of oversized classes that make it difficult for them to implement the program properly. Other problems include not having time to do all the paperwork needed for accurate records, leaders who do not seem to “listen” to the teachers, and shortages of either instructional materials or equipment needed to make copies. More than 50% of the teachers in the sample seem to say that although the Continuous Assessment Program has problems, on its own, it is a good program. Others believe that good as it might be, Swaziland was not well prepared at its formation. A small number of teachers believe that CA is not a good program and must therefore be done away with.
Significant relationships were found between implementation and the variables of educational attainment, attitude toward the program, perceived adequacy of initial and on-going training, perceived role of the head-teacher, and perceived support of the Ministry of Education. Of these variables, attitude toward the Continuous Assessment Program was the most important, followed by perceived adequacy of initial and ongoing training.
CHAPTER V

SUMMARY, FINDINGS, DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

The purpose of the present study was to investigate the extent to which primary-school teachers in Swaziland are implementing the Continuous Assessment Program and to determine personal and institutional factors that affect implementation of the same program.

This chapter is divided into six sections. The first section summarizes the methodology used to investigate the problem of the study, while the second section is a summary of the findings. The third section is a discussion of the findings, followed by a presentation of conclusions reached. Sections five and six give the implications for practice and recommendations for further research.

Summary of Methodology

The study was quantitative in nature, employing the self-report survey research method in which a questionnaire was administered to a stratified random sample of 600 Grade 1 to Grade 7 teachers. The questionnaire that I developed underwent expert judgment for validation and pilot testing. The test for Internal Consistency (Cronbach’s Alpha) was used to establish reliability.
Of Swaziland's 538 primary schools, 54 (10%) of the schools, representing an equal number of schools from each region, belonged to the sample. The total number of teachers in these schools came to 600. Four contact persons from the National Curriculum Center (NCC) delivered the Respondents to the schools and the same persons collected them from these schools. In each school a senior teacher was appointed by the NCC contact person to collect the Respondents from the teachers as soon as they had been completed. The Statistics Package for Social Sciences (SPSS) was used to analyze the data from Part I of the Respondent. Specifically, the Univariate Analysis of Variance (ANOVA), Pearson Correlation (2 tailed), Chi-square, and Multiple Regression were used to analyzed these data. Part II of the data was analyzed qualitatively.

**Summary of Findings**

The first finding is that all the major components (writing and using clearly defined objectives, giving Criterion Referenced Tests (CRT), providing remediation, providing enrichment, and keeping proper records) of the Continuous Assessment Program were being partially implemented. The least-qualified teachers are implementing the Continuous Assessment Program more than their more highly qualified colleagues.

The second finding was that there is a significant relationship between each of the variables of educational attainment, teachers' attitude toward the Continuous Assessment Program, teachers' perceived role of the head-teacher in the Continuous Assessment Program, teachers' perceived support of the Ministry of Education, perceived adequacy of initial and ongoing training, and degree of implementation. Of these variables the two
most important were attitude towards the Continuous Assessment Program and perceived adequacy of training.

The third finding was that there are major problems that teachers encounter when doing CA. These include oversized classes that make it difficult, if not impossible, to do remediation and enrichment properly. Others include lack of time for the paperwork needed to keep accurate records. In addition, inspectors and INSET were reported not to be visiting schools to help teachers implement the program well. The problem of inadequate tools, such as photocopiers, computers, and just simple basic needs such as paper, books, and instructional materials, was outstanding in some schools.

Discussion

Extent or Degree of Implementation

One of the primary purposes of the study was to determine the extent to which the primary-school teachers were implementing the Continuous Assessment Program. In order to do this, teachers' self-report responses were examined on specific indicators of using well-stated objectives giving Criterion Reference Tests (CRT), conducting remediation and enrichment, and keeping proper records.

Using Well-Stated Objectives

The first indicator of degree of implementation in the Continuous Assessment Program is the use of well-written objectives. Normally, the Curriculum Assessment Unit of the National Curriculum Center provides term objectives. Term objectives are basically a summary of the lesson objectives. In order for teachers to teach toward clear objectives, they have either to "clean" the already existing objectives, if need be, or lift them as given. Teachers are free to formulate their own behavioral objectives from given
broad aims or broad objectives. The evidence indicated that 67% of the teachers understood the NCC objectives, 67% of them also depended on and used NCC objectives, while 28% write their own objectives (Appendix A). This is consistent with the literature, which states that in most developing counties teachers depend on centralized teams to write instructional materials for them (Lockheed et al., 1991). There are three plausible reasons for this dependency on NCC objectives. First, teachers know that they are expected to use the NCC objectives. Second, teachers said they do not have time to prepare instructional materials and, third, many teachers do not have the expertise needed to design their own instructional materials. Since the instructional materials from NCC are the only definition of the Continuous Assessment Program, it is expected that to have a thorough implementation of the same, nearly all teachers would either be using NCC objectives or their own objectives based on National Curriculum Center. The data also indicated that 25.8% of teachers did not understand NCC objectives. It is difficult to imagine that this group would be writing their own objectives for the CRT on which the Continuous Assessment Program is based.

There are 30% of teachers who reported that they sometimes or not very often use NCC objectives (see Appendix A). It is possible that within this group there are teachers who never receive the instructional materials on time as indicated in the open-ended responses. Whatever the reasons are, the fact that the materials are not in use sends a signal for a less than thorough implementation of the component. Teachers who do not receive all the instructional materials for use in the Curriculum Assessment Program cannot be expected to thoroughly implement the program. It can be argued, therefore,
from the data that there is partial implementation of the use of well-written objectives in the Continuous Assessment Program.

Giving Criterion Referenced Tests

The second indicator of the degree of implementation in the Curriculum Assessment Program is the administering of the CRT. The CA unit of NCC provides schools with end-of-term tests. The purpose of this is to ensure that a common national standard for measuring achievement is maintained throughout the system. The end-of-term tests are distributed just before the end of each term to be administered to all students. At lesson level, however, the teachers are expected to develop their individual CRTs. The finding was that 39.4% of teachers gave the CRT from National Curriculum Center, 38.1% gave CRT after teaching each lesson, and 45.8% gave CRT for each unit. Although other teachers said they gave CRT sometimes (30%), one group of teachers said they never gave CRT from National Curriculum Center (7%), and 5% who said they never give any CRT (Appendix A). The CRT for each lesson needs to be developed and administered by individual teachers for their classes. Among the reasons for not giving this test is either the lack of expertise in developing one, the unwillingness of an individual teacher to give one, or the fact that there is not enough time to develop one. Perhaps some teachers feel that giving CRT takes away their teaching time. Jones et al. (1992) reported that teachers who were involved in the High Stakes Testing in Carolina noted that the time taken away from regular instruction for both test preparation and actual testing seriously narrows the focus of the curriculum, and teachers did not appreciate that.
As for the end-of-term tests, these come from NCC. In view of this, teachers would be expected to administer them. However, the open-ended responses might be used for explanations as to why some teachers are not administering them. First, some teachers reported that the tests arrive late. Others said they were not congruent with what they have covered by the time they arrive, and a small group was not satisfied with the quality of the tests.

Whatever the reasons may be for not giving CRT, without CRT the Continuous Assessment Program cannot be implemented thoroughly. It can be concluded that data indicate that this part of the program is being partially implemented.

Providing Remediation in the Continuous Assessment Program

According to the Continuous Assessment Program, remediation is conducted for non-masters and borderline cases, while enrichment is conducted for masters, the fast learners. The data indicated that 52.3% of the teachers gave remediation, 42.2% prepared their own remedial work (always and often), and 21.9% depended on NCC-prepared remedial activities. Thirty-nine percent often or always had time for non-masters, the slower learners (see Appendix A). Teachers reported in the open-ended responses that their classes were too large for one-on-one remedial help and also that they lacked resources, such as photocopiers, to enable them to make copies of needed materials. Teachers also pointed out that they did not have enough time for taking care of each child according to their learning needs and differences.

Teachers also said they give remedial work at different times. Ideally, it is expected that remediation be given after every objective if a child has not mastered the objective. If tests are given after a unit’s work, it is imperative in the Continuous
Assessment Program that teachers give remediation when necessary. This is also true for remediation after a term’s work.

Catering to individual needs is very essential in the Continuous Assessment Program. The important objective here is to make sure that every child has learned what was taught before the class moves to the next objective. In the mastery-learning model the students should always move together to the next objective. If this is not attained there will be problems with some children being ahead with learning objectives, which may make teaching even more difficult in big classes. Unless individualized learning is practiced, the enrichment group might present difficulties for the teacher. A full discussion of the disadvantages of the master learning model is beyond the focus of this study; however, it is enough to mention that it would appear that, given such big classes, the more time that is spent on remediation, the more time is also necessary for the teacher to plan on enrichment. It makes sense to argue that thorough preparation of initial teaching should be emphasized. This will help reduce the number of students needing remediation. However, according to the teachers’ view, this means that in order for initial teaching to be effective, the large numbers in the classes should be reduced. Alternatively, better methods or strategies need to be identified for catering for the reported large numbers in the classroom.

Conducting remediation after school, which was reported by 12.7% of respondents (see Appendix A), implies trying to help students who may become restless, tired, hungry, and who want to go home as soon as possible. Some students come to school by public transport, and may not be able to stay behind after school to attend to remedial activities. If they stay behind, the bus might leave them.
In many rural areas other pupils walk long distances to and from school in the company of other children. These cannot stay behind for remedial activities when the other children have left school, for fear of walking these long distances home alone. These same reasons might apply to students who may be needed for remediation just before school starts (9.8%).

Another group of teachers (3.8%) reported conducting remediation during break. It is hoped that the break is long enough (which actually may not be the case in many schools) to be shared with remediation and break for those particular students. Care has to be exercised to determine which student can utilize break time as well as have enough time for break. Students should not feel that remediation is punishment.

Most of the teachers who reported other times (15.6%) said they made special arrangements with students to meet on weekends or during some holidays to do remediation. This seems one way out of the problem of not having time. A caveat needs to be given here. The reason given for the preferred “as soon as possible” remedial activities is to enable students to move together to the next objective, having understood the present lesson, which in many cases is a prerequisite for the next day’s lesson. For that kind of lesson, waiting until the weekend or the holiday might be too late, but for end-of-term or end-of-unit remediation, such arranged times might be excellent.

In spite of the difficulties that might be experienced, 37.5% of teachers reported to be giving remediation once a week, 20.4% give remediation twice in the week, and 38.7% give remediation more than twice in the week. Remediation is a necessary component of the Continuous Assessment Program. Without it, how else would the Continuous Assessment Program ensure that all children are learning? Since common
sense and experience cannot allow an argument that those who did not report giving remediation (47.7%) have pupils who master everything that is taught, it is logical to conclude that some remediation takes place, but not all the teachers are doing it. The Continuous Assessment Program will need to revisit the issue of strategies and times for giving remediation if the program is to improve.

Conducting Enrichment

According to the Continuous Assessment Program, while remediation is being conducted, enrichment should be provided to the masters, the fast learners. Fifty-three percent of the teachers reported giving enrichment work, 27.9% said they had time (always to often) to prepare for enrichment work, and yet only 11.5% (Appendix A) said they actually prepare for enrichment. Either the enrichment being given is an on-the-spot preparation or it is being given from previous years’ experience. Whichever is the case, the training teachers receive in the Continuous Assessment Program workshops emphasizes that enrichment activities be pre-planned. Unlike remediation, enrichment work should be prepared in advance. Only 31.5% of teachers reported (often and always) that they prepared enrichment work before they teach a lesson. In the open-ended responses, teachers cited problems related to timing, class management, and teacher technical know-how when preparing the enrichment work. It has already been argued that reasons associated with long distances walked to and from schools, particularly in rural areas, and public bus systems might be causing this “no provision” of enrichment work for some classes. It should not be surprising that many teachers, given a choice, might help non-masters rather than attend to masters, who already have achieved the objective for the lesson. As in other indicators of the degree of implementation, there
seems to be a partial implementation of the Continuous Assessment Program as far as enrichment work is concerned.

Record-Keeping

The Continuous Assessment Program demands that the schools keep certain records. The records include: student-parent reports, student progress report cards, the regular student reports for other subjects, the lesson preparation plan, the scheme book, and the register. The data indicated that 67.1% of teachers kept these records (always to often). Twenty-six percent kept the proper records sometimes, and 4.2% never kept proper records of their students’ progress, although this component of the Continuous Assessment Program received highest mean response. A mean of 4.03 is an indicator that some students’ records are not being kept. This is a serious state of affairs because the system depends on proper records being kept. Whether these records are CA or not, some record of each student’s work and progress has to be kept. How else will a record be used to determine the promotion of a student to a higher grade or the retaining of a student to repeat a grade if there is no proper record-keeping?

Magagula et al. (1995) found that, in one school, school records were not complete for Grades 1 and 2; in another school first and second achievement records for Grade 1 were available for 1993; however, achievement records for Grade 1 students were not available for the third term. The explanation was that the Regional Education Office had run out of student–parent records which are produced centrally. Still, in another school, the explanation for not completing the pupil progress cards for Grade 1 was simple: the teacher did not know what to do with them. Still, in another school, although the pupils’ records were completed, the dates were not written.
Teachers reported that the program requires extensive, unmanageable record-keeping. It takes a lot of time from their regular teaching to complete these records. The point being made by these teachers is that when the CA activities were added to the system, time was not added, nor was certain content taken out to accommodate the new CA activities. As a result some teachers do not complete all records to this day. In the open-ended responses more than 50% of the teachers reported that at the end of term they have to comment on every objective for the student-parent record. This not only takes time, but parents need to be educated to understand the new system. Apparently parents were used to the ranking and class positioning system. The Continuous Assessment Program philosophy does not subscribe to the norm-reference system, which gives ranks and class positions. All these remain hurdles for some teachers to overcome.

The data, therefore, show that although some teachers keep records, there are some (already reported in the earlier section) who do not, and some reported that they never have kept any CA records. As far as proper record keeping is concerned, there is only partial degree of implementation.

General Impression of CA

Conceptually many teachers reported an understanding of the CA components. Only about 3% perceived it as a program that had “come” to destroy quality education. Another small group (5%) argued that because every child would be a successful learner, the quality of education would go down. This was an obvious misinterpretation of the CA philosophy. Teachers who believe that there ought to be failures in any system do not subscribe to the CA philosophy. Having said this, the study did not dismiss arguments put down in the teachers’ own words that if tests become too easy as to allow
all pupils to proceed to the next grade, more harm than good might be done to the Swazi students.

Problems Encountered in Doing CA

A summary of problems encountered in doing CA has already been given in chapter 4. These include large sizes, too much paper work, unavailability of instructional materials, lack of time to do all CA activities, lack of congruency in centrally set tests with what teachers have covered, late arrival of tests from the NCC to schools, too few visits from leaders of the Continuous Assessment Program to schools for monitoring the program, the problem of those teachers who have not yet been trained in CA, leaders’ lack of taking teachers’ concerns seriously, and the shortage or complete non-availability of equipment needed to make the Continuous Assessment Program implementation a success. Some of these problems could be fixed almost immediately. Others will need Ministry of Education’s intervention. Hiring of new teachers, reducing class sizes, and equipping schools with tools needed (e.g., computers, photocopiers) could require proper budgeting by the Ministry of Education and proper allocations of money from the government of Swaziland to the Ministry of Education.

Innovation Use, Level of Use, and Stages of Concern in the Continuous Assessment Program

Throughout the literature (Fullan, 1993; Hall & Hord, 2001; Hargreaves, 1994; McLaughlin, 1998; Sarason, 1998) there runs an argument and finding that one of the common and serious mistakes made by both administrators and leaders of the change process is to presume that once an innovation has been introduced and initial training has been completed, the intended users will put the innovation into practice. Recall that in
the Concerns Based Adoption Model (CBAM), it was noted that individual teachers used different parts of an innovation in different ways of patterns (Innovation Configuration). This is closely related to Level of Use (LoU). Further, it was noted that when engaged in any change process, teachers will have specific and individualistic concerns about the change and their involvement in it (Stages of Concern).

In nearly all cases the innovation as operationalized by different users will vary along a continuum from being very close to what the developer had in mind to something nearly unrecognizable. The tendency to adapt, modify, and/or mutate aspects of an innovation is a natural part of the change process. It is neither malicious nor even explicitly planned. It happens for a number of interrelated reasons, beginning with uncertainty about what is supposed to be done. Hall and Hord (2000) argue that when teachers are asked to use an innovation, they will try. The problems begin when the details of how to do it are not made clear. For the teachers in the Continuous Assessment Program, however, it would appear that most teachers understood the Continuous Assessment Program conceptually when it was introduced at a theoretical level, but as soon as they got to the classroom, they began to experience problems that had to do with a shortage of resources or tools with which to implement the Continuous Assessment Program. What resulted was the typical range of implementation patterns that result when different teachers put innovations into operation in the classrooms. These patterns are implied in the open-ended responses where teachers "talk" about different problems they are facing when attempting an implementation of the Continuous Assessment Program.
In this research, both the Level of Use (LoU) and the Stages of Concern (SoC) were found to be effective. One percent of the sample was at the *Informational* or *Personal* stages of concern, where they expressed the need to know more about the Continuous Assessment Program. Most of the teachers at this stage stated that they would welcome more training on CA. More than 80% (see Table 21) of the sample indicated their major concern as management. Teachers at this stage were concerned about time to carry out the Continuous Assessment Program and how to arrange for different students doing remediation and enrichment. Their major concerns included large numbers they have to teach, long syllabuses to be covered, late delivery of institutional materials by the government, unavailability of instructional materials, errors in test papers, and the inability of INSET and inspectors to make follow-up visits for monitoring proper implementation. Most of these were stages of concern. Very few teachers seem to have reached the impact level—a level of concern—where they are concerned about the effect of the innovation on students and what can be done to improve the effectiveness of the program. Few teachers report a need to work together to improve the program. Even for those who did, there was no mention of how students will gain from the Continuous Assessment Program. It can be argued that teachers in the Continuous Assessment Program do not seem to have reached the stage where they have intense concerns about collaborating with others to improve the outcomes of the Continuous Assessment Program. In fact, the data indicted that teachers did not work together as teams. Responses to item 34, which asks if teachers work as a team on CA, show that only 24.4% of teachers agree with the statement and 30% said they never did
that. Similar responses are given when asked whether teachers in the school encourage each other in the program.

Factors Related to the Implementation of the Continuous Assessment Program

Factors which impact the implementation of the Continuous Assessment Program are congruent with factors cited in previous research (Fullan, 1991, 1993; Hargreaves et al., 1998). Two most significant predictors were teachers' attitude toward the program and teachers' perceived adequacy of initial and on-going training. The implementation of any ongoing assessment program requires careful attention to the attitudes and knowledge base of teacher participants. Otherwise, the assessment program is doomed to failure.

Factors That Support the Continuous Assessment Implementation

The literature indicates that in any innovation there are factors that support implementation and these factors have to be viewed as interrelated or working together (Fullan & Hargreaves, 1992; Glatthorn, 1994; Hall & Hord, 2001; Hargreaves et al., 1998). In this study significant relationships were found to exist between the variables of Attitude toward the Continuous Assessment Program, Perceived Adequacy of Initial and Ongoing Training, Perceived Role of the Head-Teacher, and Perceived Support from the Ministry of Education (Table 20).

Teachers in the CAP seem to understand both the reason behind the adoption of the Continuous Assessment Program and the complexity of the program. There seems to be agreement, at least in principle, that this change is needed. There also seems to be clarity as to what the change entails in practice. The problem arises with the practicality
of the program in the absence of a long list of what teachers need the Ministry of Education to provide schools with before the educational system can consider a thorough implementation.

It is important also to note that despite the significant relationships suggested by the data, the study does not infer causation from the correlations because “a relationship between X and Y may be high, but there is no way to know whether X causes Y or Y causes X” and in this study “there may be unmeasured variables that are affecting the relationship” (McMillan & Schumacher, 2000, p. 298).

Attitude Toward the Continuous Assessment Program

In this study the attitude toward Continuous Assessment Program was found to have a significant relationship with implementation. Since the implication of this finding is that teachers who like CA might be implementing it better, then it becomes a necessary step for the Continuous Assessment Program leaders to devise ways of building better attitudes towards the program. The mean response to all items was only “slightly agree.” For example teachers slightly agreed to liking CA, having interest in CA, being enthusiastic about CA, and many said if they had a choice, they would not continue using CA. Although this investigation cannot claim to have revealed why the attitude toward the Continuous Assessment Program is not as positive as one would have thought, there are many indicators in the open-ended responses that might suggest plausible explanations for this lack of interest and liking of the program. The numerous problems already listed and discussed in earlier sections are signals that teachers may not be happy about the program.
Miles (1998) argues that, in the many innovations he studied, successful implementation was a result of many interrelated variables. One of these is that individuals involved in the change should master the change and that mastery will lead to commitment. Hall and Hord (2001) argue that for change to succeed, all participants need to view the education system, not as a vertical top-down or bottom-up world. Rather, all participants need to recognize that they are members of one system; the only way that change is going to succeed is if participants learn to trust and applaud the roles each professional plays. If teachers have a distorted view of change-initiators' responsibilities, they will not appreciate the role they, themselves, play. If teachers think that policy makers mandate things for teachers to do without considering the demands of the day-to-day classroom, then their limited view will negatively impact the implementation of the program. In the same way if policymakers have a limited view, their expectations of teachers will not match what is realistically possible in the classroom where teachers find themselves.

According to Hall and Hord (2001):

Meaningful change is not going to be possible until people at all points come to understand the whole system and begin to trust members elsewhere in the system especially when they themselves have limited knowledge of how other parts of the system work. Through some sort of system-wide community-building processes, respect and trust must be developed for all along the policy-to-practice continuum, together with an understanding that the system will not change until everybody along the continuum does his or her part. (p. 12)

What happens at the initial stages might have an influence on how the whole program is viewed. For example, if teachers believe that the Continuous Assessment Program “was brought” to them and “forced down their throats” (to put it in one teacher’s words in the open-ended responses), then those teachers who feel that way do not identify
themselves with the program. For those teachers, CA is something to do because someone at the top says it should be done. Having said that, it is common knowledge that mandates are used widely by many centralized systems—that is just how the systems operate.

Hall and Hord (2001) bring in an interesting contribution about mandates. They argue that although mandates are continually criticized, they can work well if they are accompanied with continuing communication, ongoing training, on-site coaching, and time for implementation. For the Continuous Assessment Program, huge amounts of money were spent in the initiation phase to introduce the program, support the training programs, and produce instructional materials for use. From the number of visits the CA leaders are reported to be making, seemingly this support has been greatly reduced soon after the introductory phase of the program.

This study seems to be in agreement with Glatthorn's (1994) observation that for a successful implementation of any innovation, teachers need to welcome the change, believe in it as a means of fostering student achievement, and believe that they can do it. Finally, it should be accepted that decision makers can establish standards for curricula and examinations, official timetables, teacher certification criteria, and attendance and promotion policies, but they cannot control what happens in the classroom. Yet teaching and learning occur at that level.

Initial and Ongoing Training

A significant relationship was found between perceived initial and ongoing training of the Continuous Assessment Program. Since it is known that the most effective forms of training are ongoing, rather than the one-shot course with no follow-up
Miles, 1998, Sarason, 1995), the finding that some teachers have never been either visited by policy makers or had follow up workshops by National Curriculum Center representatives has to be treated as an “emergency.” In-service teacher education, particularly ongoing programs that monitor and evaluate teachers regularly, has shown much promise for improving teaching in developing countries (Lockheed & Verspoor, 1991). Until such a time as when the Ministry of Education has provided such services, it will be unrealistic to expect a thorough implementation of the Continuous Assessment Program.

Educational Attainment

The finding that the least qualified teachers (PTC) were implementing the Continuous Assessment Program at a significantly higher degree than their more qualified colleagues should not be surprising. When the Continuous Assessment Program was introduced, some reluctance and negativity were reported in the daily papers from the degreed teachers and the teacher unions. Apparently, their unwillingness to accept the Continuous Assessment Program was ignored (Regueld, 1998), as they were not directly involved at the time. Most of the degreed teachers work in high schools. Havelock and Huberman (1978) reported a similar finding about developed countries. The authors argued that, in highly industrialized countries, teachers might be less likely to take major risks by taking on innovations, which they are not certain of implementing successfully. It appears that in Swaziland the less qualified teachers are more likely to adhere to the stipulated curricula irrespective of likely problems during implementation. In short, they have a tendency of accepting to do as they are told.
Perceived Role of Head-Teacher

The finding that there is a significant relationship between the perceived head-teacher role in the Continuous Assessment Program and implementation is in agreement with the literature (Fullan, 1991; Hall & Hord, 2001; Hargreaves, 1992; Miles & Huberman, 1994). Although the head-teacher role (items 35, 36, and 37: my head-teacher likes CA, my head-teacher is interested in CA, and my head-teacher helps me understand CA better) had a mean response of 3.1, this was still higher than the teachers' own mean response of 2.7 for similar items. This implies that teachers view head-teachers as liking and being interested in the Continuous Assessment Program a little more than themselves. Given that head-teachers function as the lower link from the school through district supervisors to the central ministerial staff, these head-teachers are often overburdened with administrative tasks. To make matters worse, some operate under chronic shortages of materials, operating funds, and staff development resources, which makes instructional improvement extremely difficult. Many teachers said that their head-teachers do not help them understand the Continuous Assessment Program better. It is important to emphasize that in order for the Continuous Assessment Program to be well-implemented, the principals will need to devote considerable time to coordinating and managing instruction, be highly visible in the schools, and stay close to the instructional process. The principals will need to adopt what Peters and Weberman (1988) have termed “management by wandering about style” of executives of successful large corporations (cited in Lockheed et al., 1991). Furthermore, it was found in this study that teachers would like to work in collaboration with each other and share not only goals, but their experiences as well. By doing this they will create more strategies for
implementing the Continuous Assessment Program rather than “be told what to do” all the time.

Support of the Ministry of Education

A significant relationship between perceived support of the Ministry of Education and implementation was found in this study. Teachers were concerned about inspectors and INSET’s failure to visit them (teachers). If this concern is not attended to urgently, the CAP might continue to be partially implemented. It has been argued in chapter 1 that the support should be more than formal; it must be active, where leaders show interest by spontaneous visits to demonstrate their interest to the teachers. Unless some kind of support is demonstrated, the Continuous Assessment Program may not go beyond the program that was planned in theory, but also that never really got to a stage of thorough implementation.

Many advocates for bottom-up change argue that those nearest the action have the best ideas of how to accomplish the change; yet in practice, those in power mandate many innovations in developing countries. For the Continuous Assessment Program the teachers seem not to argue that they would like to be in the position of initiating innovations, rather that an introduction of a new program requires more time, more money, more support, and continued in-service training. In short, for a successful implementation of the Continuous Assessment Program, the Ministry of Education would need to support the teachers on an ongoing basis.

Teaching Experience in the Continuous Assessment Program

Teaching experience in CA was not found to have any significant relationship with implementation. A possible explanation for this finding may be that irrespective of
one’s teaching experience, problems faced in implementing the Continuous Assessment Program remain the same. Second, teachers did not have as positive an attitude of the Continuous Assessment Program as one would like, although this is typical for mandated programs. This in itself might imply that the teachers of all experiences may not really like and be interested in CA. Finally it could be argued that what really matters is not how long one has been teaching, but the quality of their teaching.

In summary, the study has indicated that in the Continuous Assessment Program, many factors work together, rather than in isolation from each other, to ensure a thorough or successful implementation.

### Conclusion

Fullan (1991) convincingly argues that implementation is a variable. It can be thorough, partial, superficial, or non-existent. It is with this concept in mind that data for this study were examined. Data indicated that the primary components of the Continuous Assessment Program using well-stated objectives, giving criterion reference testing, conducting remediation and enrichment, and keeping proper records were all being implemented partially. This is a critical finding for the Continuous Assessment Program because of the need for current summative program evaluations. There is need to say to what extent the goals and objectives of CA have been realized, and it can only be said whether the intended outcomes of CA have been achieved if it is known that CA is happening in the way it was intended. So far it can be said that the Continuous Assessment Program’s implementation does not, as yet, fully correspond with its initial vision. Any summative evaluations that are to be made ought to take this partial implementation of the primary indicators into consideration. This acknowledgment
becomes paramount because, as has been observed in the literature, increased student
gains is the ultimate goal of school improvement practice. However, for students to
benefit from any new program or practice, the innovation must first be in operation in
each and every classroom. In order for judgments to be made about the Continuous
Assessment Program, first it must be determined whether it indeed is in operation.
Innovation after innovation has been assessed before it can be determined whether in fact
it was implemented. Judgments are passed, and such judgment continues to contribute to
the decades-old practice of rejecting changes even before they have been implemented
fully. In addition, some educational systems (seeming more so in developing countries)
have moved forward to use results of partially implemented innovations.

Recommendations

Based on the review of literature and the findings of this study, the
recommendations are given in two categories: those which need to be addressed
specifically by the Ministry of Education, and recommendations for further research.

Recommendations for the Ministry of Education

It is strongly recommended that:

1. The Ministry of Education attend to the problem of large class sizes by either
   building more classrooms or increasing the number of teachers per school.

2. The Ministry of Education should provide basic requirements such as
electricity, photocopiers, typewriters, computers where possible, and all other stationery
   that will help the implementation process.

3. Continuous in-service courses should be provided to teachers.
4. NCC re-visits syllabuses with an aim of reducing the same where necessary.

5. INSET and inspectors should have specific schedules to visit schools each year to identify and help teachers who need help in implementing the Continuous Assessment Program.

6. NCC, through the CA unit, should continue to assist by training teachers with the implementation of the Continuous Assessment Program. In the training of teachers, classroom management should be emphasized to curb the major complaints on large class sizes. The issue of times to give remediation should be re-visited.

7. Materials should be available during vacation for all schools at agreed-upon centers.

8. The Continuous Assessment Unit of the NCC should be supported in networking with other innovators in developing countries with similar projects and programs.

Recommendations for Further Research

It is recommended that further research be conducted on:

1. Determining strategies for managing large class size in Swaziland. This research should include methods that teachers are actually using at present and why.

2. Actual classroom observations to closely monitor what is actually happening in the classroom. The in-depth classroom observation should be conducted in a selected number of schools in each region.

3. Determining to what extent the Continuous Assessment Program has improved student learning in schools where it is being implemented successfully.

4. Similar studies in countries implementing programs of the same nature as
the Continuous Assessment Program.
APPENDIX A

TABLES
Table 23

**Individual Responses on Extent or Degree of Implementation**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Not Very Often</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. I use NCC objectives as in NCC books</td>
<td>207</td>
<td>140</td>
<td>125</td>
<td>31</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(39.8%)</td>
<td>(26.9%)</td>
<td>(24.0%)</td>
<td>(6.0%)</td>
<td>(2.1%)</td>
</tr>
<tr>
<td>8. I write my own objectives from NCC books</td>
<td>58</td>
<td>88</td>
<td>207</td>
<td>66</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>(11.2%)</td>
<td>(16.9%)</td>
<td>(39.8%)</td>
<td>(12.7%)</td>
<td>(17.1%)</td>
</tr>
<tr>
<td>9. I understand the objectives from NCC books</td>
<td>196</td>
<td>150</td>
<td>134</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>(37.7%)</td>
<td>(28.8%)</td>
<td>(25.8%)</td>
<td>(5.8%)</td>
<td>(1.2%)</td>
</tr>
<tr>
<td>10. I give CRT developed by NCC</td>
<td>98</td>
<td>107</td>
<td>169</td>
<td>61</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>(18.8%)</td>
<td>(20.6%)</td>
<td>(32.5%)</td>
<td>(11.7%)</td>
<td>(7.1%)</td>
</tr>
<tr>
<td>11. I give remedial work to my class</td>
<td>150</td>
<td>122</td>
<td>166</td>
<td>54</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>(28.8%)</td>
<td>(23.5%)</td>
<td>(31.9%)</td>
<td>(10.4%)</td>
<td>(4.0%)</td>
</tr>
<tr>
<td>12. I have time for helping non-masters</td>
<td>96</td>
<td>107</td>
<td>164</td>
<td>113</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>(18.5%)</td>
<td>(20.6%)</td>
<td>(31.5%)</td>
<td>(21.7%)</td>
<td>(6.7%)</td>
</tr>
<tr>
<td>13. I prepare my own remedial activities</td>
<td>97</td>
<td>122</td>
<td>182</td>
<td>77</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>(18.7%)</td>
<td>(23.5%)</td>
<td>(35.0%)</td>
<td>(14.8%)</td>
<td>(6.3%)</td>
</tr>
<tr>
<td>14. I depend on NCC remedial activities</td>
<td>50</td>
<td>64</td>
<td>172</td>
<td>146</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>(9.6%)</td>
<td>(12.3%)</td>
<td>(33.1%)</td>
<td>(28.1%)</td>
<td>(15%)</td>
</tr>
<tr>
<td>15. I prepare remedial activities with other teachers</td>
<td>24</td>
<td>36</td>
<td>130</td>
<td>103</td>
<td>217</td>
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<tr>
<td></td>
<td>(4.6%)</td>
<td>(6.9%)</td>
<td>(25.0%)</td>
<td>(19.8%)</td>
<td>(41.7%)</td>
</tr>
<tr>
<td>16. I give enrichment work to my pupils</td>
<td>137</td>
<td>138</td>
<td>153</td>
<td>63</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>(26.3%)</td>
<td>(26.5%)</td>
<td>(29.4%)</td>
<td>(12.1%)</td>
<td>(4.0%)</td>
</tr>
<tr>
<td>17. I give enrichment activities when necessary</td>
<td>125</td>
<td>128</td>
<td>175</td>
<td>57</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>(24.0%)</td>
<td>(24.6%)</td>
<td>(33.7%)</td>
<td>(11.0%)</td>
<td>(2.7%)</td>
</tr>
<tr>
<td>18. I develop CRT for each lesson</td>
<td>93</td>
<td>105</td>
<td>156</td>
<td>81</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>(17.9%)</td>
<td>(20.2%)</td>
<td>(30.0%)</td>
<td>(15.6%)</td>
<td>(5.0%)</td>
</tr>
<tr>
<td>19. I give CRT for each unit</td>
<td>121</td>
<td>117</td>
<td>147</td>
<td>56</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>(23.3%)</td>
<td>(22.5%)</td>
<td>(28.3%)</td>
<td>(10.8%)</td>
<td>(5.2%)</td>
</tr>
<tr>
<td>20. I prepare enrichment activities pre lesson</td>
<td>89</td>
<td>75</td>
<td>140</td>
<td>94</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td>(17.1%)</td>
<td>(14.4%)</td>
<td>(26.9%)</td>
<td>(18.1%)</td>
<td>(19.6%)</td>
</tr>
<tr>
<td>21. I have time for preparation of enrichment work</td>
<td>78</td>
<td>67</td>
<td>160</td>
<td>122</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>(15.0%)</td>
<td>(12.9%)</td>
<td>(30.8%)</td>
<td>(23.5%)</td>
<td>(15.8%)</td>
</tr>
<tr>
<td>22. I keep accurate records of my pupils' progress</td>
<td>255</td>
<td>94</td>
<td>97</td>
<td>39</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>(49.0%)</td>
<td>(18.1%)</td>
<td>(18.7%)</td>
<td>(7.5%)</td>
<td>(4.2%)</td>
</tr>
</tbody>
</table>

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Table 24

*Individual Responses on to Attitude Toward the Continuous Assessment Program*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Slightly Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>26. I like CA.</td>
<td>46</td>
<td>8.8</td>
<td>102</td>
<td>19.6</td>
<td>177</td>
</tr>
<tr>
<td>I am interested in CA.</td>
<td>41</td>
<td>7.9</td>
<td>98</td>
<td>18.8</td>
<td>165</td>
</tr>
<tr>
<td>I am excited about CA.</td>
<td>25</td>
<td>4.8</td>
<td>61</td>
<td>11.7</td>
<td>122</td>
</tr>
<tr>
<td>I like to give remedial activities in CA.</td>
<td>67</td>
<td>12.9</td>
<td>150</td>
<td>28.8</td>
<td>144</td>
</tr>
<tr>
<td>I enjoy keeping records in CA.</td>
<td>62</td>
<td>11.9</td>
<td>109</td>
<td>21.0</td>
<td>115</td>
</tr>
<tr>
<td>I am enthusiastic about enrichment in CA.</td>
<td>36</td>
<td>6.9</td>
<td>108</td>
<td>20.8</td>
<td>167</td>
</tr>
<tr>
<td>Teachers in my school like CA.</td>
<td>22</td>
<td>4.2</td>
<td>61</td>
<td>11.7</td>
<td>144</td>
</tr>
<tr>
<td>Teachers in my school encourage me in CA.</td>
<td>23</td>
<td>4.4</td>
<td>59</td>
<td>11.3</td>
<td>112</td>
</tr>
<tr>
<td>In my school, teachers work as a team in CA.</td>
<td>47</td>
<td>9.0</td>
<td>80</td>
<td>15.4</td>
<td>88</td>
</tr>
<tr>
<td>My head-teacher likes CA.</td>
<td>125</td>
<td>24.0</td>
<td>123</td>
<td>23.7</td>
<td>115</td>
</tr>
<tr>
<td>My head-teacher is interested in CA.</td>
<td>118</td>
<td>22.7</td>
<td>117</td>
<td>22.5</td>
<td>137</td>
</tr>
<tr>
<td>My head-teacher helps me understand CA better.</td>
<td>64</td>
<td>12.3</td>
<td>89</td>
<td>17.1</td>
<td>117</td>
</tr>
<tr>
<td>If I had a choice, I would continue using CA.</td>
<td>48</td>
<td>9.2</td>
<td>68</td>
<td>13.1</td>
<td>121</td>
</tr>
<tr>
<td>CA strategies have improved my teaching</td>
<td>66</td>
<td>12.7</td>
<td>94</td>
<td>18.1</td>
<td>140</td>
</tr>
</tbody>
</table>

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Table 25

**Individual Responses on Perceived Support Items by Teachers**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Slightly Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>NCC staff is able to explain CA concepts that I do not understand very well.</td>
<td>73</td>
<td>14.0</td>
<td>123</td>
<td>23.7</td>
<td>140</td>
</tr>
<tr>
<td>I depend on NCC to solve some of my problems in CA.</td>
<td>37</td>
<td>7.1</td>
<td>118</td>
<td>22.7</td>
<td>147</td>
</tr>
<tr>
<td>INSET staff are helpful in identifying where I need help in CA.</td>
<td>45</td>
<td>8.7</td>
<td>93</td>
<td>17.9</td>
<td>131</td>
</tr>
<tr>
<td>INSET staff are able to explain CA concepts I do not understand well</td>
<td>51</td>
<td>9.8</td>
<td>111</td>
<td>21.3</td>
<td>149</td>
</tr>
<tr>
<td>I depend on INSET staff to solve some of my problems in CA</td>
<td>26</td>
<td>5.0</td>
<td>66</td>
<td>12.7</td>
<td>129</td>
</tr>
<tr>
<td>Inspectors are able to explain CA concepts that I do not understand very well.</td>
<td>47</td>
<td>9.0</td>
<td>81</td>
<td>15.6</td>
<td>108</td>
</tr>
<tr>
<td>I depend on inspectors to solve some of my problems in CA.</td>
<td>8</td>
<td>1.5</td>
<td>47</td>
<td>9.0</td>
<td>101</td>
</tr>
</tbody>
</table>
Table 26

*Individual Responses to Perceived Adequacy of Initial and Ongoing Training in the Continuous Assessment Program*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Slightly Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My initial training in CA was adequate (sufficient) to implement CA.</td>
<td>67 (12.9%)</td>
<td>106 (20.4%)</td>
<td>150 (28.8%)</td>
<td>89 (17.1%)</td>
<td>86 (16.5%)</td>
</tr>
<tr>
<td>I need more training in CA to implement it well</td>
<td>145 (27.9%)</td>
<td>136 (26.2%)</td>
<td>98 (18.8%)</td>
<td>54 (10.4%)</td>
<td>71 (13.7%)</td>
</tr>
<tr>
<td>There is ongoing training in CA in the zonal follow-up workshops.</td>
<td>86 (16.5%)</td>
<td>143 (27.5%)</td>
<td>126 (24.2%)</td>
<td>73 (14.0%)</td>
<td>81 (15.6%)</td>
</tr>
<tr>
<td>The training I am getting at ongoing workshops helps me to implement CA.</td>
<td>72 (13.8%)</td>
<td>121 (23.3%)</td>
<td>157 (30.2%)</td>
<td>78 (15.0%)</td>
<td>76 (14.6%)</td>
</tr>
<tr>
<td>There is a need to develop better instructional material for CA.</td>
<td>248 (47.7%)</td>
<td>140 (26.9%)</td>
<td>47 (9.0%)</td>
<td>36 (6.90%)</td>
<td>36 (96.9%)</td>
</tr>
<tr>
<td>Using clearly defined objectives.</td>
<td>98 (18.8%)</td>
<td>147 (28.3%)</td>
<td>124 (23.8%)</td>
<td>78 (15.0%)</td>
<td>45 (8.7%)</td>
</tr>
<tr>
<td>Writing clearly defined objectives</td>
<td>87 (16.7%)</td>
<td>109 (32.5%)</td>
<td>118 (22.7%)</td>
<td>63 (12.1%)</td>
<td>39 (7.5%)</td>
</tr>
<tr>
<td>Giving CRT.</td>
<td>69 (13.3%)</td>
<td>129 (24.8%)</td>
<td>161 (31.0%)</td>
<td>77 (14.8%)</td>
<td>36 (6.9%)</td>
</tr>
<tr>
<td>Providing remedial work.</td>
<td>57 (11.0%)</td>
<td>143 (27.5%)</td>
<td>164 (31.5%)</td>
<td>77 (14.8%)</td>
<td>42 (8.1%)</td>
</tr>
<tr>
<td>Providing enrichment work.</td>
<td>66 (12.7%)</td>
<td>134 (25.7%)</td>
<td>155 (29.8%)</td>
<td>78 (15.0%)</td>
<td>47 (9.0%)</td>
</tr>
<tr>
<td>Keeping records.</td>
<td>121 (23.3%)</td>
<td>127 (24.4%)</td>
<td>116 (22.3%)</td>
<td>63 (12.1%)</td>
<td>57 (11.0%)</td>
</tr>
</tbody>
</table>

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QUESTIONNAIRES
Questionnaire 1

FOR EXPERT JUDGES

CONTINUOUS ASSESSMENT (CA) IMPLEMENTATION SURVEY

What are your ideas about CA implementation? Information from this survey helps determine the future of CA in Swaziland. All individual responses and comments are kept securely in confidence. Please do not write your name anywhere on this form.

DEMOGRAPHIC INFORMATION

Instruction: Please check the most appropriate response.

1. Gender: Male _____ Female _____

2. Highest level of education completed
   PTC _____ PTD _____ STC _____ STD/PTD _____ B. Ed (primary) _____
   BA/BSC _____
   ______________ Other (please specify)

3. Age: Less than 20 _____ 21-25 _____ 26-30 _____ 31-35 _____ 36-40 _____ over 40 _____

4. Location of your present school:
   Urban area _____ Semi-urban _____ Rural _____

5. Class size:
   Less than 20 _____ 20-30 _____ 31-40 _____ 41-50 _____ more than 50 _____

6. For how long have you used CA strategies in your teaching
   Never _____ 1-3 years _____ 4-6 years _____ more than 7 years _____

7. Total number of years at your present school _____

8. Teaching experience in CA in years _____

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9. Present grade you teach _____

**Major components of CA**

Circle one answer for each statement

Strongly agree = 5  Agree = 4  Undecided = 3 Disagree = 2  Strongly disagree = 1

**Writing clearly defined objectives**

10. I use NCC objectives as written in the NCC books. 5  4  3  2  1
11. I write my own objectives from NCC books. 5  4  3  2  1
12. I understand the objectives in NCC books. 5  4  3  2  1

**Giving criterion referenced tests (CRT)**

Tick where appropriate

13. I give CRT Yes _____ No _____
14. I give CRT at the end of each lesson _____ each unit _____ each term _____.
15. I give CRT at the end of each week _____ two weeks _____ three weeks _____.

**Providing remedial activities**

16. I give remedial work to my pupils Yes_____ No_____  
17. I give remedial work  
   Once a week _____ twice a week _____ more than three times a week ____.  
18. NCC has provided adequate remedial activities in the books  
   I use 5  4  3  2  1  
19. I give remedial work  
   During the lesson _____ during break _____ after school _____ just before school starts _____ at other times (say when) __________________________________________.  
20. I prepare my own remedial activities 5  4  3  2  1  
21. I entirely depend on suggested remedial activities from NCC 5  4  3  2  1
22. I prepare remedial activities with other teachers 5 4 3 2 1

**Providing enrichment activities**

23. I give enrichment work to my pupils Yes____ No____

24. I give enrichment work only when needed by pupils 5 4 3 2 1

25. I prepare enrichment activities before I teach a lesson 5 4 3 2 1

26. I give enrichment work once a week_____ twice a week_____ more than three times a week_____.

27. I give enrichment work to lessen noise during class 5 4 3 2 1

28. I prepare my enrichment work for each lesson 5 4 3 2 1

**Keeping records**

29. I keep records of my pupils progress 5 4 3 2 1

30. My head teacher is the one who keeps my class’s progress records 5 4 3 2 1

**Attitude toward CA**

31. My attitude toward CA is positive 5 4 3 2 1

32. My head teacher’s attitude towards CA is positive 5 4 3 2 1

33. Other teachers in my school like CA 5 4 3 2 1

34. I like CA 5 4 3 2 1

**Perceived support**

35. The Ministry of Education has been supportive as far as instructional materials are concerned 5 4 3 2 1

36. NCC gives me encouragement for CA 5 4 3 2 1

37. INSET gives me encouragement for CA 5 4 3 2 1

38. The Inspectorate helps me in implementing CA 5 4 3 2 1

39. Other teachers help me understand CA 5 4 3 2 1
Perceived adequacy of training

40. My initial training CA was adequate (sufficient) to implement CA 5 4 3 2 1
41. I need more training in CA to implement well 5 4 3 2 1
42. I think there is ongoing training in CA in the zonal follow up workshops 5 4 3 2 1
43. I think the training I am getting at ongoing workshops helps me to implement CA 5 4 3 2 1
44. There is need to develop better instructional material for CA 5 4 3 2 1
45. There are many problems in CA 5 4 3 2 1

Perceived role of head teacher

46. My head teacher helps me understand CA better 5 4 3 2 1
47. My head teacher likes CA 5 4 3 2 1
48. My head teacher is interested in CA 5 4 3 2 1
49. If I had a choice, I would stop doing CA 5 4 3 2 1

I feel that I received adequate orientation on:

50. Using clearly defined objectives 5 4 3 2 1
51. Writing clearly defined objectives 5 4 3 2 1
52. Giving CRT 5 4 3 2 1
53. Providing remedial work 5 4 3 2 1
54. Providing enrichment work 5 4 3 2 1
55. Keeping records 5 4 3 2 1
PART B

56. What is your general impression of CA?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

57. Do you encounter any problems when implementing CA?

Yes ______________ No ______________

If yes what problems do you encounter in doing CA?
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

58. How do you think the problems can be solved?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

59. Do you have any comments about CA?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
Questionnaire 2

For main Study

CONTINUOUS ASSESSMENT (CA) IMPLEMENTATION SURVEY

A. IMPORTANT DEMOGRAPHIC (PERSONAL) INFORMATION
Instruction: Please complete this section by placing an (x) in the box beside your response.

1. Gender: Male [ ] Female [ ]

2. Age: Less than 20 [ ] 21 - 25 [ ] 26 - 30 [ ] 31 - 35 [ ] 36 - 40 [ ] over 40 [ ]

3. Highest level of education completed: (Please check only one)
   PTC [ ] PTD [ ] STC [ ] STD [ ] B. Ed (primary) [ ] BA/BSC [ ]
   Other (please specify) __________________________

4. Teaching experience in CA (in years)
   Less than 2 [ ] 2 - 4 [ ] 5 - 7 [ ] more than 7 [ ]

5. Location of your present school:
   Urban area [ ] Semi-urban [ ] Rural [ ]

6. Class size: (please specify) ______________

Major components of CA (how much CA are you doing?)

B: Instruction: Please circle only one answer for each statement
   5 = Always  4 = Often  3 = Sometimes  2 = Not very often  1 = Never

7. I use NCC objectives as written in the NCC books. 5 4 3 2 1
8. I write my own objectives from NCC books. 5 4 3 2 1
9. I understand the objectives in NCC books. 5 4 3 2 1
10. I give CRT developed by NCC. 5 4 3 2 1
11. I develop CRT for each lesson. 5 4 3 2 1

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12. I give CRT for each unit.  
13. I give remedial work to my class.  
14. I have time for helping non-masters.  
15. I prepare my own remedial activities.  
16. I depend entirely on suggested remedial activities from NCC.  
17. I prepare remedial activities with other teachers.  
18. I give enrichment work to my pupils.  
19. I give enrichment activities only when necessary.  
20. I prepare enrichment activities before I teach a lesson.  
21. I have time for preparation of enrichment work.  
22. I keep accurate records of my pupils' progress.  

For numbers 23 through 25, place an (x) beside the appropriate response:

<table>
<thead>
<tr>
<th>I give remedial work:</th>
<th>Once each week [ ]</th>
<th>Twice each week [ ]</th>
<th>More than twice each week [ ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>I give enrichment work:</td>
<td>Once each week [ ]</td>
<td>Twice each week [ ]</td>
<td>More than twice each week [ ]</td>
</tr>
<tr>
<td>I give remedial work:</td>
<td>During the lesson [ ]</td>
<td>During break [ ]</td>
<td>After school [ ]</td>
</tr>
<tr>
<td>Just before school starts [ ]</td>
<td>At other times [ ]</td>
<td>State when _________________</td>
<td></td>
</tr>
</tbody>
</table>

C. Attitude toward CA: Please circle one answer for each statement:

<table>
<thead>
<tr>
<th>5 = strongly agree</th>
<th>4 = agree</th>
<th>3 = Slightly agree</th>
<th>2 = disagree</th>
<th>1 = strongly disagree</th>
</tr>
</thead>
</table>
26. I like CA.  
27. I am interested in CA.  
28. I am excited about CA.  
29. I like to give remedial activities in CA.  
30. I enjoy keeping records in CA.  
31. I am enthusiastic about enrichment in CA.  
32. Teachers in my school like CA.  
33. Teachers in my school encourage me in CA.  
34. In my school, teachers work as a team in CA.  
35. My head-teacher likes CA.  
36. My head-teacher is interested in CA.  
37. My head-teacher helps me understand CA better.  

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38. If I had a choice, I would continue using CA. 5 4 3 2 1
39. CA strategies have improved my teaching. 5 4 3 2 1

**Perceived support**

40. NCC staff are able to explain CA concepts that I do not understand very well 5 4 3 2 1
41. I depend on NCC to solve some of my problems in CA. 5 4 3 2 1
42. INSET staff are helpful in identifying where I need help in CA. 5 4 3 2 1
43. INSET staff are able to explain CA concepts I do not understand well. 5 4 3 2 1
44. I depend on INSET staff to solve some of my problems in CA. 5 4 3 2 1
45. Inspectors are able to explain CA concepts that I do not understand very well. 5 4 3 2 1
46. I depend on inspectors to solve some of my problems in CA. 5 4 3 2 1

**E. For questions 47 and 48 place an “x” in the box beside your response (answer)**

47. How many times, in a year, does INSET staff visit your school to help you in CA?
   Never [ ] Once [ ] Twice [ ] Three times [ ]
48. How many times per year do inspectors visit your school to help you in CA?
   Never [ ] Once [ ] Twice [ ] Three times [ ]

**F. Perceived adequacy of training**

49. My initial training in CA was adequate (sufficient) to help me implement CA: 5 4 3 2
50. I need more training in CA to implement it well. 5 4 3 2
51. There is ongoing training in CA in the zonal follow-up workshops. 5 4 3 2
52. The training I am getting at ongoing workshops helps me to implement CA: 5 4 3 2
53. There is a need to develop better instructional material for CA: 5 4 3 2
I feel that I have received adequate **orientation** in CA on:

<table>
<thead>
<tr>
<th></th>
<th>Using clearly defined objectives</th>
<th>Writing clearly defined objectives.</th>
<th>Giving CRT.</th>
<th>Providing remedial work.</th>
<th>Providing enrichment work.</th>
<th>Keeping records.</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**PART II - Please write your comments on the space provided**

60. What is your general impression of CA?

61. What problems do you encounter in doing CA?

62. How do you think the problems you encounter in doing CA can be solved?

63. Do you have any comments or suggestions on the monitoring and implementation of CA?
CA Pilot Teacher Feedback

You, as a pilot teacher, are the most important person in this study. It is very important that you help to improve this questionnaire before it is sent to about 500 teachers. Please answer the following questions.

• How much time did you spend filling out the questionnaire? _____________________

• Did you understand all the items? Yes  No

• If No, which items did you not understand? ________________________________

• Do you have any comments or suggestions about the questionnaire?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Thank you very much.
Hibajene Monga Shandomo
APPENDIX B

LETTERS
10 August 2000

To all selected Expert Judges at the NCC

Dear Expert Judge,

Your position in education is an important one. As an instructional designer in the NCC, you are aware of the serious responsibilities that come with the Continuous Assessment Program (Continuous Assessment Program).

I am certain that you are aware that I am now doing a PhD in Education at Andrews University here in the U.S.A. I am interested in determining the degree to which the primary school teachers in Swaziland are implementing the Continuous Assessment Program.

I know that you and I share a common interest and concern for the problem under investigation. It is on this basis of a common goal of increased knowledge about the Continuous Assessment Program that I am requesting you cooperation in accepting to become an expert judge for this first draft questionnaire on the Continuous Assessment Program. As an Expert Judge I am requesting you to do two major things: to check if appropriate questions have been asked and also to check if questions asked adequately cover the five major components of the Continuous Assessment Program, writing of clearly defined objectives, providing the CRT, providing remediation and enrichment, and keeping of proper records. Additionally, I am requesting you to check if sufficient questions have been, in your opinion, asked on attitudinal characteristics: attitude towards the Continuous Assessment Program, perceived adequacy of initial and ongoing training, perceived support from the Ministry of Education (Ministry of Education), and perceived role of the head-teacher.

I also depend on you experience to critique the directions, specific items and the intended cover letter to the pilot teachers. Please feel free to make any comments you think will be helpful to improve the questionnaire.

I thank you in advance for your valued feedback.

Sincerely,

Hibajene Shandomo
10 August 2000

To all selected Expert Judges at INSET

Dear Expert Judge,

Your position in education is an important one. As a senior member of the In-service Teacher Education department at William Pitcher College, you are aware of the serious responsibilities that come with the Continuous Assessment Program.

I am a student from Swaziland doing a doctoral study at Andrews University, Berrien Springs, Michigan. I am interested in determining the degree to which the primary school teachers in Swaziland are implementing the Continuous Assessment Program.

I know that you and I share a common interest and concern for the problem under investigation. It is on this basis of a common goal of increased knowledge about the Continuous Assessment Program that I am requesting your cooperation in accepting to become an expert judge for this first draft questionnaire on the Continuous Assessment Program. As an Expert Judge I am requesting you to do two major things: to check if appropriate questions have been asked and also to check if questions asked adequately cover the five major components of the Continuous Assessment Program, writing of clearly defined objectives, providing the CRT, providing remediation and enrichment, and keeping of proper records. Additionally, I am requesting you to check if sufficient questions have been, in your opinion, asked on attitudinal characteristics: attitude towards the Continuous Assessment Program, perceived adequacy of initial and ongoing training, perceived support from the Ministry of Education (Ministry of Education), and perceived role of the head-teacher.

I also depend on your experience to critique the directions, specific items and the intended cover letter to the pilot teachers. Please feel free to make any comments you think will be helpful to improve the questionnaire.

I have enclosed a self-addressed envelop for your reply.

I thank you in advance for your valued feedback.

Sincerely,

Hibajene Shandomo
5 February, 2001

The Director
Ministry of Education
P. O. Box 976
Mbabane
Swaziland

Dear Sir/Madam

I am a student from Swaziland working toward my Ph.D. in Education at Andrews University, Berrien Springs, Michigan. Before I was granted study leave, I had the privilege of serving the Ministry of Education for 10 years.

I am writing to seek your permission to conduct a research study on Continuous Assessment Programme (CAP) in Swaziland. My interest in Continuous Assessment has a long history, as I was one of the pioneer members of the NCC-CA team. The purpose of my study is to determine to what extent the primary school teachers in Swaziland are implementing the CAP. My study will involve at least 10% of randomly selected schools from the nation’s primary schools. This makes my study nationwide.

The human subjects review board at Andrews University has approved my study. I will appreciate to hear from you on this important matter. A summary of the findings will be available to you and your ministry as soon as my results are out if permission for me to carry out the study is granted.

Yours Faithfully,

Hibajene Monga Shandomo
April 1, 2001

Pilot Teachers
School of Education
Andrews University
Berrien Springs, Michigan 49104

Dear CA Teacher:

Your position in education is an important one. As a teacher, you are a vital link between the children, school, community and the Ministry of Education. You are all aware of the serious responsibilities that come with the Continuous Assessment Program.

I am a student from Swaziland doing a doctoral study at Andrews University, Berrien Springs, Michigan. I am interested in determining the degree to which primary school teachers in Swaziland are implementing the Continuous Assessment Program.

You have been selected as a pilot teacher in this nationwide study. You and all the other 49 teachers have been carefully selected. Permission has been secured from the Ministry of Education, the NCC Director and the CA coordinator to request your cooperation.

You and I share a common interest and concern for the problems under investigation. It is on this basis of a common goal of increased knowledge about our Continuous Assessment Program that I am requesting your cooperation in filling out the enclosed questionnaire.

The questionnaire contains two major parts. Part I is divided into sections A, B, C, D, E and F. Section A requests personal information about you. The other sections are concerned with your implementation of the major components of the Continuous Assessment Program and your perceptions of the head-teacher in helping you with CA. Part II is open-ended, with space provided for your response.

Professionals from NCC, INSET and experts in education from the University of Swaziland have carefully studied the questionnaire. My dissertation committee has also approved it. You do not need to sign the questionnaire and I assure you that your responses will remain anonymous and confidential. Your participation is, of course, voluntary.

Please answer all the questions and return the completed questionnaire to the NCC evaluator, Mr. Newman Khumalo, using the enclosed self-addressed envelope.

Yours Faithfully,

Hibajene Monga Shandomo
Dear CA Teacher:

Your position in education is an important one. As a teacher, you are a vital link between the children, school, community and the Ministry of Education. You are all, by now, aware of the serious responsibilities that come with the Continuous Assessment Program.

I am a student from Swaziland working towards my Ph.D. in Education at Andrews University, Berrien Springs, Michigan. I am interested in determining the degree to which primary school teachers in Swaziland are implementing the Continuous Assessment Program.

This is a nationwide study. You and all the participants have been randomly selected. Permission has been secured from the Ministry of Education to request your cooperation. Andrews University's Human Subjects Review Board has also approved this study.

We share a common interest and concern for the problems under investigation. It is on the basis of a common goal of increased knowledge about our Continuous Assessment Program that I am requesting your cooperation in filling out the enclosed questionnaire. Fifty teachers like you from Swaziland, involved in a private study, were asked to complete the questionnaire. They unanimously reported that it took no more than 30 minutes to fill out. In addition, professionals from NCC, INSET and the University of Swaziland carefully studied and evaluated the questionnaire.

The questionnaire contains two major parts. Part I is divided into sections A, B, C, D, E and F. Section A requests personal information about you. The other sections are concerned with your implementation of the major components of the Continuous Assessment Program and your perceptions of the head-teacher in helping you with CA. Part II is open-ended, with space provided for your response.

You do not need to sign the questionnaire and I assure you that your responses will remain anonymous and confidential. Please answer all the questions and be ready to return the completed questionnaire to the NCC contact person when they come to collect it on ______________________, 2001.

A summary of this study will be given to the Ministry of Education, NCC and INSET who will then, I am sure, make it available to you.
Please note the meaning of the following abbreviations.

CA, Continuous Assessment
CAP, Continuous Assessment Program
CRT, Criterion Referenced Test
INSET, In-service and Education Training at William Pitcher College
NCC, National Curriculum Center in Manzini

Thank you for your cooperation.

Hibajene Monga Shandomo
REFERENCE LIST
REFERENCE LIST


