



TEACHERS' WORK AND EDUCATION REFORM:

RESEARCH REPORT

JUNE 2000

OECS Education Reform Unit (OERU)
Villa Apartments
Morne Fortune
Castries
ST. LUCIA

**Teachers' Work and Education Reform:
ECERP Initiative No.4100-4**

Research Report

June 2000

Project Team

Ms. Suzanne Hébert

Tecsult Eduplus
Canada

Mr. Johnson Cenac

OECS Education Reform Unit
St. Lucia

Dr. Henry Hinds

OECS Education Reform Unit
St. Lucia

Mr. Anthony Lockhart

Ministry of Education and Youth
Dominica

Dr. Arthur Richardson

University of the West Indies
Cave Hill Campus, Barbados

Dr. Natalie Kishchuk

Research Consultant
Canada

Ms. Susan Sproule

Tecsult Eduplus
Canada

Local Counterparts

Mr. Patrick Welcome

Ministry of Education
St. Kitts and Nevis

Mr. Rodney Rey

Albena Lake Hodge Comprehensive School
Anguilla

Mr. Alric Taylor

Ministry of Education
Montserrat

Mr. Patrick Felix

Ministry of Education
St. Lucia

Mrs. Laura Browne

Ministry of Education
St. Vincent and the Grenadines

Mrs. Sonia Williams

Newtown Primary School
Dominica

Mrs. Valentine Lewis

Department of Education and Culture
British Virgin Islands

Mr. Francis Sookram

Ministry of Education
Grenada

Mr. Reginald Peterson

Ministry of Education
Antigua/Barbuda

The project team would like to thank all the teachers and principals who gave up their time and energies to make this survey possible.

Table of Contents

1.	Introduction.....	1
2.	Literature Review	2
2.1	Organizational and professional commitment: definitions and consequences.....	2
2.2	External environmental factors in teacher commitment.....	4
2.3	Internal organizational factors	5
2.4	Individual and professional factors in teacher commitment	8
2.5	Summary and conceptual framework.....	9
3.	Method	12
3.1	Counterpart consultation and training	12
3.2	Teacher survey questionnaire pretest	14
3.3	Survey data collection	17
4.	Results.....	18
4.1	Survey return rate and data quality.....	18
4.2	Sample characteristics	18
4.3	Data analyses: Summary of steps.....	21
4.4	Psychometric analyses	22
4.5	Commitment to teaching by teacher characteristics	23
4.6	Determinants of commitment	27
4.7	Gender and determinants of commitment	29
4.8	School level and determinants of commitment.....	30
4.9	School location and determinants of commitment	32
4.10	Professional qualifications and determinants of commitment	33
4.11	Multivariate analyses: Determinants of teacher commitment.....	34
4.12	Multivariate analyses: Differences by country	36
4.13	Determinants of attitudes toward education reform.....	37
4.13	Qualitative findings	41
5.	Conclusions	45

References

- Appendix 1: Survey Questionnaire
Appendix 2: Focus Group Interview Guide

1. Introduction: Study Context

As part of its 1998-99 Work Plan, the Eastern Caribbean Education Reform Project (ECERP) conducted an investigation of Eastern Caribbean teachers' views of their work, working conditions and the current education reform program. Teachers are the critical interface between the broad systemic reforms now being undertaken in the Eastern Caribbean and student outcomes including motivation, school completion and academic achievement. Their role is critical to successful education reform, but their point of view on their work and their role in education reform has never, until now, been examined systematically at the sub-regional level.

Informal and formal consultations during the conduct of the Eastern Caribbean Education Reform Project have indicated that there are significant concerns regarding the teaching cadre in the Eastern Caribbean. Teacher morale is seen to be low, turnover among teachers perceived to be high especially at the secondary level, and commitment to the teaching profession is perceived to be weak. Qualitative research undertaken for the Student Attitudes Survey, an ECERP initiative conducted in 1998, revealed that teachers' level of engagement in their students' progress and perceived commitment to the field of teaching were seen to be important correlates of student performance and school completion. This finding is confirmed in the quantitative data from the Student Attitudes survey: throughout the Eastern Caribbean states, teachers' level of involvement and support, as perceived by their students, is one of the three most important determinants of student attitudes to school and teacher-rated performance. Findings from the research literature also show that teachers with higher levels of involvement and commitment are better able to motivate students to achieve and to remain in school (Vallerand, Fortier, & Guay, 1997; Delgado-Gaitan, 1988; Epstein, 1992).

The purpose of this study was therefore to analyze the major factors influencing teachers as agents of successful education reform, with a main focus on teacher morale and commitment. Its ultimate aim is to help identify a series of practical, affordable initiatives in support of teachers' role, which can be implemented at the discretion of individual OECS states and across the sub-

region. In a representative sample of primary and secondary school teachers, the primary outcomes of morale and commitment, along with their main determinants, were assessed. Focus groups were also conducted with teachers in each of the Eastern Caribbean states to explore in depth the extent of and reasons for low morale and weak commitment. The study took a very broad view of the determinants of morale and commitment, including: professional preparation and identification, issues related to curricula and pedagogy, organizational structures and factors both within schools and within the education system as a whole, physical, temporal and social working environments, professional accountability and responsibility, social prestige of the profession, and career and professional development opportunities, and issues related to remuneration and benefits.

This document reports on the findings of the study. First, a brief literature review provides the background to the conceptual framework used. After a description of the data collection methodology, the results of both the qualitative and quantitative investigations are presented.

2. Literature Review

2.1 Organizational and professional commitment: definitions and consequences

Although several theoretical models of organizational and professional commitment exist, commitment is generally defined as identification and involvement with an organization or profession, including acceptance of its goals and values, a willingness to exert efforts on its behalf, and a desire to remain a part of it (Riehl & Sipple, 1991, Meyer, Allen & Smith, 1993). Commitment to teaching, like that to other types of work, has both a psychological component, reflected in a personal interpretation of the teaching experience as absorbing, meaningful and full of psychic rewards, and a behavioral component, reflected in such organizational behaviours as attendance, retention, and non-classroom activity participation (Riehl & Stipple, 1996; Rosenholtz & Simpson, 1990; Mueller, Wallace & Price, 1992; Angle & Perry, 1991). Some theorists

distinguish between several types of commitment: 1) affective commitment, the emotional underpinning of the attraction to or desire to remain with an organization or profession; 2) continuance commitment, or the desire to remain part of a profession or organization because there are no more appealing alternatives; and 3) normative commitment, the desire to stay with an organization because of social pressure to do so (Meyer & Allen, 1991; Meyer, Allen & Smith, 1993). These three forms of commitment can have different implications for organizational performance (Meyer, Pauonen, Gellatly, Goffin & Jackson, 1989) and can be produced by different combinations of work experiences and work values (Meyer, Irving & Allen, 1998). Although all are significant predictors of work behaviours such as tardiness, absenteeism, loyalty and professional activity, affective commitment is generally the strongest predictor (Meyer, Allen & Smith, 1993).

In contemporary educational research, commitment has been shown to be related to work satisfaction and perceived self-efficacy in teaching, as well as to retention in the profession. Moreover, teachers who are dissatisfied and disengaged from work, finding in it few rewards or little future, may use a number of coping strategies which are detrimental to student outcomes. These include blaming parents for poor cooperation and parenting skills, blaming students for disciplinary and behavioral problems, developing collegial relations which focus on sharing negativity about school, etc. (Lee, 1991). In classrooms with disruptive or problem students, disengaged teachers may move completely away from academic goals and concentrate classroom life on maintaining control and discipline rather than learning (Lee et al., 1991).

Organizational and occupational commitment have several types of determinants: external environmental factors, internal school factors, and professional/personal factors (Shaw & Reyes, 1992; Riehl & Stipple, 1996; Rosenholtz & Simpson, 1990; Reyes, 1990; Peterson & Martin, 1990). We briefly examine each of the categories in turn.

2.2 External environmental factors in teacher commitment

Student profile

An important source of self-efficacy and work satisfaction, which are both important correlates of commitment for teachers, is derived from how well their students perform. The ability profile of students in the classroom, both objectively and as perceived by the teacher, is thus not surprisingly related to commitment. Classrooms with mostly low ability students or students for whom the teacher has low performance expectations are associated with low teacher satisfaction and self-efficacy (Lee et al., 1991). Although in the Eastern Caribbean public school system the ability level of students within classrooms is partly a policy issue, through selection processes for secondary education, and partly a neighbourhood effect, it should be kept in mind that in and of itself more prestigious schools do not generally have a higher level of teacher efficacy or higher staff satisfaction or morale (Lee et al., 1993). In other words, it is the concentration of low ability students in one classroom, not the school as a whole, which negatively affects teachers.

School size and climate

School size is an important correlate of teacher outcomes. Larger schools tend to have a more bureaucratic environment, with many rules and strict roles. In highly bureaucratic schools with rigid authority structures or a more utilitarian organizational culture, school climate and social cohesion may be negatively affected, which in turn results in alienation, lack of social engagement and lack of commitment (Lee et al., 1993; Shaw & Reyes, 1992). However, recent research suggests that it is not size of the school per se which is the causal factor, but rather the ways in which school leadership and organization create working environments which are supportive of a sense of professional community and of responsibility for student learning (Louis et al., 1996).

Teacher outcomes and salary

Several American studies have found that there is little or no relationship between salary levels and levels of teacher engagement (Lee et al, 1991). However, the generalizability of these studies to the Caribbean context may be limited. In studies across other occupations, pay and commitment have been shown to have a small positive correlation (Mathieu & Zajac, 1990). Differential incentive policies such as merit pay may produce, rather than correct, problems of teacher commitment (Firestone & Pennell, 1993).

2.3 Internal organizational factors in teacher commitment

Professional autonomy

Schools' internal organization may also affect teacher outcomes. Teachers who have an at least moderate level of autonomy over their classroom practices and who feel they have a sense of control over what happens in their classroom report that they are more effective as teachers (Lee et al, 1991), are more committed to their work (Rosenholtz & Simpson, 1990) and are more satisfied (Rosenholtz, 1989). Standardized curricula and centralized achievement testing have the effect of increasing alienation and reducing commitment to teaching, because they act as constraints on autonomy (Firestone & Pennell, 1993).

Climate, organization and cohesion

Teachers' commitment to both teaching as a profession and to their schools is strongly related to general school climate (as assessed by the level of administrative support received, support for teacher autonomy and control, orderliness, buffering provided by management, and teaching help received (Riehl & Sipple, 1996)). Teachers' sense of efficacy in teaching, their sense of community within the school, and their expectations for success in advancing learning among their students, are related to orderliness of student behaviour, support for innovation, administrative responsiveness, task interdependence (knowing other teachers' subjects), and inter-teacher support (Newmann, Rutter & Smith, 1989).

Greater amounts of collegial interaction within schools is associated with greater teacher satisfaction and performance (Lee et al., 1991). Positive, work-related interaction among teachers is important because it reduces the extreme isolation felt by many teachers in highly bureaucratized schools, provides opportunities to exchange support and assistance, provides exposure to new instructional options, and fosters a sense of community within the school (Rosenholtz, 1989; Rosenholtz & Simpson, 1990).

Several school reform attempts have focussed on increasing teachers' participation as a means of improving the sense of community within the school. Teachers' participation in school decision-making can under some circumstances increase commitment, especially when the participation concerns school policies or goals, when the goals of participation are clear, and where the school environment and principal are open and supportive of input from teachers (Firestone & Pennell, 1993). However, such restructuring efforts may only be associated with increasing work satisfaction for more experienced teachers (Conley & Levison, 1993). Teachers' willingness to participate in school decision-making is largely a function of their relationship with the principal; principals who are seen as more open, collaborative and supportive are more likely to generate genuine participation (Smylie, 1992).

More generally, school restructuring or reform is facilitated in school environments where there is a stronger sense of professional community among teachers, that is, a shared sense of purpose, a collective focus on student learning, collaborative activity, open attitudes toward being observed and helped by others (deprivatized practice) and reflective dialogue. These conditions are also associated with a stronger belief among teachers that their students are capable of successful learning and that they are themselves responsible and effective agents in producing learning (Louis, Marks & Kruse, 1996). In these authors' eyes, education reform which focuses on increasing professionalization of the teaching cadre without attention to creation within individual schools of 'healthy, professionally sustaining environments' (Louis et al., 1996, p. 787) are doomed to failure.

Boundary vs. core factors

Teachers' work has been conceptualized as consisting of two main types of tasks: boundary task and core tasks. The latter are the essential instructional activities which directly produce student learning. Boundary tasks are those which must be dealt with by teachers and schools in order for the core tasks to take place. These include non-teaching tasks such as administrative work, maintaining orderliness and organization, and dealing with discipline problems, as well as the provision of an adequate physical environment, separated from other settings and provided with necessary equipment and supplies. Teacher commitment is higher when the school organization and management are able to buffer teachers from boundary tasks, allowing them to direct most of their energies to core tasks (Rosenholtz & Simpson, 1990).

Structure and hierarchy

In schools which are organized into departments and teachers are encouraged to see themselves as subject-matter specialists, commitment to the school as a whole may suffer (Lee et al., 1993). Teachers in communally organized schools (those having: 1) a system of shared values about learning, behaviour and students' futures, 2) common activities among all school members, and 3) an ethos of caring manifested in relations among teachers and an extended teacher role) have higher satisfaction, are seen by students as enjoying their work, and have higher morale. These factors are in turn associated with lower rates of student problem behaviour and drop out (Bryk & Driscoll, 1998).

School management

Efficient school management, where information and resources are provided to teachers in a timely manner as required, is related to teacher satisfaction. Having easy, informal access to the school management is also associated with satisfaction (Lee et al. 1993). Staff morale is higher in schools with clear and consistent rules and policies, which are enforced consistently. Schools with principals who exercise effective leadership have teachers who are more satisfied with their work and see themselves as more effective (Lee et al., 1993). In schools where principals establish, share and reinforce the attainment of clear, school-wide goals for student performance and professional development, academic success is greater and teachers are more satisfied and self-efficacious in their work. Effective performance evaluation procedures for teachers also enhance teacher effectiveness and student achievement) because they furnish clear feedback on areas for improvement (Lee et al., 1991).

2.4 Individual and professional factors in teacher commitment

Several individual factors have been found to be related to teachers' level of commitment.

Female teachers are more committed than male, and older teachers are more committed than younger teachers. More experienced teachers, but not more highly educated teachers, have higher levels of commitment (Reyes, 1990; for a cross-occupational confirmation, see Mathieu & Zajac, 1990). In general however, personal antecedents of employee commitment are less strong predictors of organizational commitment among professional than other types of occupations (Cohen, 1992).

Professional pride and prestige are also associated with teacher outcomes. Respect from students, parents and the community is related to a positive sense of belonging to the profession, and thus to commitment. Partaking in opportunities for professional development also increases a sense of commitment (Louis et al., 1996).

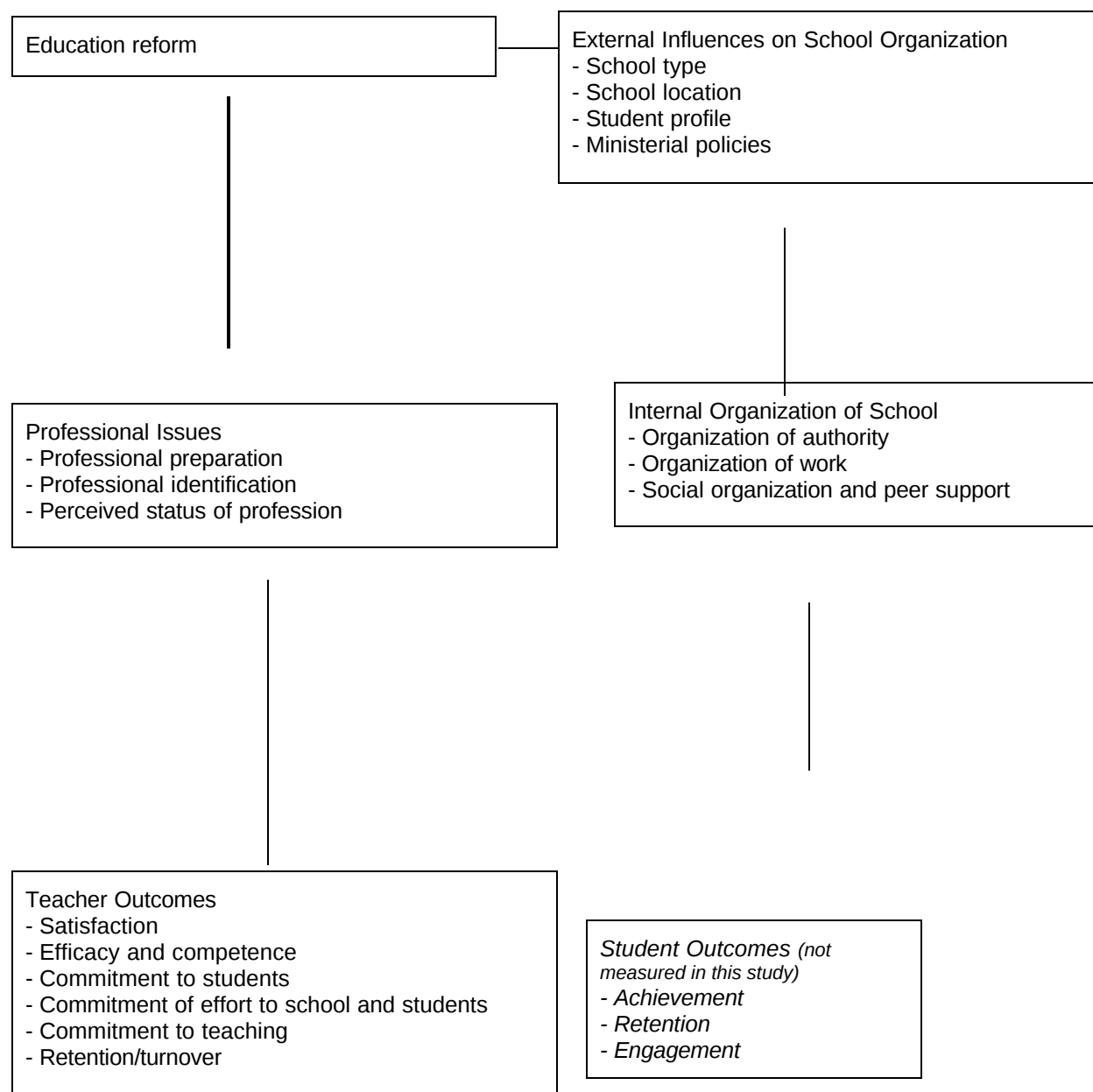
2.5 Summary and conceptual framework

This brief literature review has helped to identify the most important factors in teacher commitment to their schools and to teaching. Among these possible influences on commitment, it seems that internal organization factors -- leadership, management, authority structures and collegiality -- are most central. Although very little of the literature reviewed to date deals with teachers' roles in the context of a major systemic education reform, it has been shown that reforms are most likely to be successful in environments which already possess some of the strengths of effective schools. Conversely, they are least likely to be successful in school environments characterized by staff alienation and disempowerment and rigid, closed authority structures where teachers have little sense of community and assume little responsibility for student outcomes -- in short, in those schools in most urgent need of reform.

The conceptual framework adopted for the study is shown below. This model has been adapted slightly from that of Lee, Bryk & Smith (1993), to reflect our primary interest in teacher outcomes, to add professional issues as an area of concern, and to add the presumed mediating

influence of education reform. This framework guided the development of the draft survey instruments (focus group discussion guide and self-administered questionnaire), which were then subject to the validation and pretesting described in the next section.

Conceptual Framework: Teachers' Work and Education Reform



3. Method

The limited resources available for this study as well as the need to collect information from all participating states in the spring of 1999 led to the choice of a combination focus group and survey methodology. A brief, anonymous self-administered questionnaire was completed by a small representative sample of teachers in each country. In addition, a large focus group with diverse groups of teachers was conducted in each OECS country.

3.1 Counterpart Consultation and Training

Local counterparts for the study were identified by Chief Education Officers in each OECS country. The counterparts took on primary responsibility for managing the administration of the survey and for organizing the focus groups within each country.

In December 1998, counterparts from all OECS countries except Montserrat participated in a two-day consultation and workshop. The draft set of focus group and survey instruments were provided in advance of the meetings. The goals of this meeting were: 1) to validate and revise the conceptual framework and draft survey instruments, based on counterparts' knowledge of the teaching cadre and education systems within their countries; 2) to familiarize counterparts with the survey design and to provide training in the necessary aspects of educational and survey research design; and 3) to create and strengthen links among the counterparts and with the OERU project team.

The workshop covered all aspects of the survey, including its purpose and objectives, the conceptual model underlying the choice of issues to be examined and the survey instruments. The survey sample and sampling procedures were discussed in depth, as were the mechanics of survey administration, issues of standardization and quality control, and ethical issues in research in work

settings.

The discussion during this consultation confirmed the overall validity of the conceptual model but sharpened focus on several issues specific to the Caribbean context:

- the issue of job and decision latitude was seen to be a difficult one in the Eastern Caribbean because traditionally, teachers have had unlimited powers within their classrooms. One of the agendas of the reform process is to increase standardization in classroom teaching, which could be construed as decreasing job latitude and contributing to teacher disempowerment;
- a factor in teacher effectiveness where teacher training is not universal and textbooks not always available or appropriately adapted, is teacher knowledge of subject matter. It was felt that teachers' degree of comfort with the subject matter they are expected to teach would be an important issue to assess in the study;
- teacher evaluation was generally seen as less effective than it could be
- school characteristics may be important determinants of teacher outcomes, with urban versus rural and Catholic versus non-Catholic schools expected to affect teachers differently;
- teachers' gender was also a factor of great interest, with implications for the growth of the gender gap in the Caribbean;
- low levels of commitment were seen to be associated with a tendency for teachers and their professional associations to put the blame for poor performance on the home environment or other external factors;
- retention in the teaching profession was regarded as a serious concern. New recruits often view teaching as simply one among several alternative public service professions and not necessarily their first choice, and will freely move out of teaching at the first opportunity. The high turnover among teachers due to the profession's low prestige also creates an organizational instability within schools
- teaching was also seen to not generally enjoy much prestige in the population.
- in order to better understand the career dynamics of OECS teachers, it was suggested that statistics on the age and gender of the teaching cadre be obtained and cast in the light of demographic trends in the region;
- the role of salary conditions in teacher commitment and satisfaction was felt to be

minimal;

- it was noted that professional development opportunities are limited in the OECS context, and the career ladder is very short. It was felt that these two factors, coupled with an ageing teaching cadre, contribute to low levels of satisfaction and morale;
- teachers' role in education reform was recognized as critical, but it was felt that generally, teachers have little awareness of or interest in these issues and do not see themselves as instrumental in effective change. It was thus felt to be very important to assess teachers' views of the implications of the reform for their classrooms and their perceptions of the links between their teaching conditions, outcomes, and reform.

These discussions led to several revisions and additions to the draft questionnaire and focus group interview guides.

3.2 Teacher Survey Questionnaire Pretest

In January 1999, the revised version of the questionnaire was then subjected to a quantitative pilot test among 35 teachers in St-Lucia. The objective of this pretest was to ensure, within a reasonably representative sample of OECS teachers, that all items had adequate psychometric properties: symmetrical, ideally normal, distributions rather than bimodal or flat distributions, which would indicate adequate variation, and lack of ceiling or floor effects. It also provided an opportunity to for teachers to make comments and suggestions about the survey.

The data were coded and entered by the OERU project staff, thus providing an opportunity to develop the preliminary template and data entry procedures for the main survey. Analyses of the pretest data were conducted using SPSS-PC version 8.0. Internal consistency coefficients (Cronbach's alphas) were calculated for the three main scales as based on their theoretical justification in the conceptual framework: teachers' perceptions of their work, factors influencing teachers' work and views of the current education reform. Also examined were patterns

of inter-item correlations within the scales, the scale alphas when each item was deleted, and patterns of missing data. In all analyses, mean scores were substituted for missing values.

In general, the results showed that the survey items had adequate psychometric properties, and that the three main scales had adequate internal consistency (for teachers' perceptions of their work: $\alpha = 0.75$; for factors influencing teachers' work, $\alpha = 0.79$, and for views of the current education reform, $\alpha = 0.59$).

Based on the results of these analyses as well a review of comments provided by teachers, three minor changes were made to the survey instrument: 1) addition of an item measuring the balance between academic and non-academic topics in the curriculum; 2) addition of an item measuring the availability of teaching resources; and 3) inclusion of an additional measure of the levels of teacher training.

The final survey instruments consisted of 58 items, in the following sections:

Commitment to teaching and to students:	11 items, measured on four-point Likert scales from <i>strongly disagree</i> to <i>strongly agree</i> . Examples are: <i>"I am committed to the profession of teaching"</i> and <i>"I am interested in my students' lives"</i> .
Intentions to remain in teaching:	One open-ended item where the respondent stated the kind of work he or she hoped to be doing, teaching or otherwise, in five years' time.
Factors influencing commitment:	In response to the question "do each of the following positively or negatively influence your feelings about your work, or have no influence?", measured on a five-point scale with the endpoints labeled <i>influences me very negatively</i> and <i>influences me very positively</i> , and the midpoint labeled <i>has no influence on me</i> .
Curriculum	5 items. Examples are: <i>"The academic content of the curricula I teach"</i> and <i>"The ease with which I can adapt the curriculum to my students' needs"</i> ,

Students' characteristics	8 items. Examples are: <i>"Having students with poor attitudes in my class"</i> and <i>"My students' family backgrounds"</i> .
School administration	11 items. Examples are <i>"The opportunities I have to participate in decisions about how the school is run"</i> and <i>"The level of autonomy I have in my work."</i>
Career & professional development	5 items. Examples are: <i>"The opportunities for professional training and development"</i> and <i>"The methods that are used to assess my performance"</i> .
Salary and leave conditions	3 items. Examples are: <i>"My salary level"</i> and <i>My conditions of leave"</i> .
Education reform	6 items, measured on four-point Likert scales from <i>strongly disagree</i> to <i>strongly agree</i> . Examples are <i>"I am interested in the education reforms"</i> and <i>"Teachers should be involved in planning the education reform"</i> . One open-ended item where the respondent stated what teachers' role in eastern Caribbean education reform should be.

Demographic characteristics collected were: gender, school level (primary or secondary), school location (urban or rural), training (untrained, trained, or B. Ed.); level of academic qualifications (number of CXC's or A-levels, associate, bachelor's or Master's degree).

3.3 Survey Data Collection

The survey data collection was conducted during the last two weeks of January 1999. Using Ministry of Education employment lists, local counterparts selected a random, representative sample of schools, representing up to 5% of the teaching force in each country. The samples were constructed so as to be representative of the distribution of rural and urban schools, primary and secondary schools, teachers' gender, and teachers' education level.

Counterparts made arrangements with schools where teachers were sampled for distribution of the questionnaires. The required number of questionnaires was sent to each school. The returned questionnaires were returned directly to the counterpart, who then forwarded them to the OERU offices. The questionnaires were completely anonymous, to ensure that sensitive issues could be addressed confidentially.

The survey data were entered into SPSS-PC Version 8.0 and analyzed at the OERU offices in St. Lucia.

In the last two weeks of January and first two weeks of February 1999, counterparts arranged for the conduct of a focus group teachers in their country by recruiting participants and organizing the location and refreshments. In order to accommodate as many points of view as possible, up to 20 participants were recruited for each group. Those recruited included teachers of varied school level (primary and secondary), age and experience level, and training level (with no training, with some training, and highly qualified). Both male and female teachers, from rural and urban schools, were recruited. In some countries, counterparts themselves moderated the group discussion, while in others they arranged for a member of the research team or experienced moderator to take on this task. A member of the research team was present at each of the groups, except in St. Vincent (where two focus groups were held). The survey questionnaires were also distributed during the focus group sessions to all participants.

The focus group data were summarized by the moderator or research team members and forwarded to the research team, who conducted the qualitative analyses summarized in Section 4.1.4.

4. Results

4.1 Survey Return Rate and Data Quality

Sampling targets were met in all countries. A total of 497 questionnaires were returned from teachers. The data were generally of very high quality, with less than five percent of data missing on most items. The survey sample can be considered representative of the teaching cadre in the OECS.

4.2 Sample characteristics

Overall, 71 % of respondents were female, and 29 % were male. Female teachers were concentrated at the primary level: 75% of primary teachers, but only 65% of secondary teachers, were women. The average number of years of teaching experience was 14.8, indicating a fairly young teaching force. The average tenure in the current position was 8.2 years.

The following tables show the distribution of respondents by country, school location and school level. Sixty-three percent of respondents taught in primary schools, and 58% taught in urban schools.

Table 1**Distribution of Respondents by Country and School Level**

Country	Primary school	Secondary school	TOTAL
Anguilla	12	10	22
Antigua & Barbuda	31	19	50
British Virgin Islands	19	8	27
Dominica	39	29	68
Grenada	40	8	48
Montserrat	11	15	26
St. Kitts and Nevis	40	13	53
St. Lucia	64	46	110
St. Vincent and the Grenadines	44	27	71
TOTAL	300 (63%)	175 (37%)	475

Table 2
Distribution of Respondents by Country and School Location

Country	Urban School	Rural school	TOTAL
Anguilla	17	6	23
Antigua & Barbuda	28	25	53
British Virgin Islands	13	13	26
Dominica	38	31	69
Grenada	42	4	46
Montserrat	2	19	21
St. Kitts and Nevis	33	20	53
St. Lucia	68	38	106
St Vincent and the Grenadines	27	41	68
TOTAL	268 (58%)	197 (42%)	465

Table 3, below, shows the distribution of teachers according to their level of education and professional qualifications. About one-quarter of teachers in the sample (27%) have no training as teachers, while overall about two-thirds (67%) of teachers are trained. Only 6% of OECS teachers in this sample hold Bachelor of Education degrees. About 70% of teachers do not hold degrees of any type, while 30% hold either Associate degrees, Bachelor of Arts or Bachelor of Science degrees, or Master's degrees.

Table 3
Distribution of Respondents by Level of Education and Professional Qualifications

Level of Education	Untrained	Trained	B.Ed.	TOTAL
4 CXC's or less	19	71	0	90 (20%)
5 CXC's or more	49	130	5	184 (41%)
1 A level	9	6	0	15 (3%)
2 A levels	7	3	0	10 (2%)
3 A levels	12	3	0	15 (3%)
Associate degree	7	47	1	55 (12%)
BA/BSc degree	16	39	19	74 (17%)
Master's degree	0	1	4	5 (1%)
TOTAL	119 (27%)	300 (67%)	29 (6%)	448

4.3 Data Analyses: Summary of steps

The main steps in the analysis of the survey data were:

- ? Data verification: frequencies and search for outliers
- ? Factor analyses to form and/or validate scale factor structure
- ? Descriptive statistics for all survey items and scales
- ? Psychometric analyses (internal consistency) for all scales and subscales
- ? Cross-tabular (bi-variate) analysis by main stratification variables
- ? Multiple linear regression analyses predicting each of the outcome variables from the set of predictors, according to the conceptual framework.

The final two steps were prepared for both all OECS countries participating in the survey, and for each country separately.

The sole negatively worded item was reversed coded. In all analyses, mean scores were substituted for missing values.

4.4 Psychometric Analyses

Internal consistency coefficients (Cronbach's alphas) were calculated for the scales as based on their theoretical composition. Also examined were patterns of inter-item correlations within the scales and patterns of missing data. In the following table, the results of the internal consistency analyses are shown for the outcome and determinant variables included in the survey. As these analyses show, all of the scales and subscales have acceptable psychometric properties. Although internal consistency coefficients should ideally be .75 or higher, these levels are acceptable for research examining inter-group, as opposed to inter-individual, differences.

Table 4
Psychometric Analysis Results

Scale	No. of items	Reliability coefficient
Teacher's Work	11	.72
Factors influencing work (whole scale)	32	.87
Students' characteristics	8	.74
Curriculum	5	.63
School administration	11	.80
Career and professional development opportunities	5	.66
Conditions of service	3	.72
Education Reform	6	.59

4.5 Commitment to teaching and to students by teacher characteristics

In Table 5, the main outcome variable, teachers' interest in and commitment to teaching and their students, is shown according to the main characteristics of teachers measured in the study. Overall, the mean levels of commitment are quite high, in the top quarter of the 4-point scale.

Male and female teachers are equally highly committed to teaching, as are teachers at the primary and secondary levels. Teachers in both rural and urban locations are also equally committed to teaching.

Untrained teachers are significantly less committed to teaching than are teachers with Bachelor's of Education qualifications ($F(2, 472) = 7.3, p < .01$; significant Sheffé post-hoc contrast).

Although there is an overall significant difference in commitment according to academic qualifications ($F(7, 447) = 2.2, p < .05$), Scheffé post-hoc contrasts show that no difference between any two adjacent groups is large enough to be significant. The overall pattern of means suggest that teachers with A level qualifications are least committed to their work as teachers.

Table 5
Mean Level of Commitment¹ by Teacher Characteristics

Characteristics	Mean (Standard deviation)
Gender	
Male	3.2 (.34)
Female	3.2 (.34)
School Level	
Primary	3.2 (.34)
Secondary	3.2 (.35)
School Location	
Urban	3.2 (.34)
Rural	3.2 (.35)
Professional Qualification	
Untrained	3.1 (.38) ^{*a}
Trained	3.2 (.33) ^{a,b}
B. Education	3.4 (.29) ^b
Academic Qualification	
4 CXC's or less	3.3 (.32)
5 CXC's or more	3.2 (.33)
1 A level	3.1 (.33)
2 A levels	3.0 (.43)
3 A levels	3.0 (.34)
Associate degree	3.3 (.33)
BA/BSc degree	3.2 (.36)
Master's degree	3.1 (.39)

¹1 = Weakest commitment, 4 = Strongest commitment.

* One way analysis of variance, $p < .01$. Means with different superscripts are significantly different from each other.

Intentions to remain in teaching

As previously mentioned, teachers who responded to the survey were asked to indicate what type of work they hoped to be doing in five years' time. The responses to this open-ended question were coded into six categories, and the results, for all OECS respondents as well as for

each country, are shown in Table 6.

This table shows that in most countries and in the OECS as a whole, less than half of teachers responding to this survey¹ wish to be teaching at the primary or secondary level in five years' time. In other words, more than half, and sometime two-thirds of the teaching cadre in the OECS countries hope to be doing some other kind of work in the near future. For about one-third of respondents, their desire is to remain connected to the teaching profession, very often by moving into school administration or ministry positions; others in this group wish to become counselors rather than classroom teachers. However, a fairly sizable proportion, almost one-quarter of all OECS teachers, hope to be doing some kind of work which is completely outside the teaching profession in five years.

These results are somewhat at odds with the relatively positive scores obtained on the quantitative measure of level of commitment. They do provide a very telling indicator of continuance commitment, one of the three important dimensions of organizational and professional commitment. The more positive results for the commitment ratings may reflect a positivity or social desirability bias in the ratings, or difference in the types of commitment measured. In any case, the results do underscore the need to examine determinants of commitment to teaching among Eastern Caribbean teachers.

1. Note that the response rate for the open-ended questions was lower than that for the ratings scales; in this case, responses were provided by 425 respondents, or about 87% of the sample.

Table 6
Desired Work in Five Years' Time by OECS Country: % of Teachers

Type of work	Total OECS n=425	Anguilla n= 21	Antigua n=43	BVI n=20	Dominic a n=59	Grenada n=36	Montser- rat n=22	St Kitts/ Nevis n=50	St. Lucia n=98	St. Vincen tGrenadi nes n=67
Teaching in primary or secondary school	42	33	33	55	37	33	36	46	45	42
Education-related work but not teaching (includes administration)	28	28	33	30	31	39	23	18	30	28
Other public service work (e.g. social work)	6	5	-	-	10	11	5	2	3	5
Other line of work, e.g. in business	22	24	30	15	22	8	32	34	15	22
Retired from teaching	2	10	5	-	-	8	5	-	-	2

4.6 Determinants of commitment

This section of the results presents the overall levels of the factors influencing teacher commitment, for the whole OECS and for each country. These results show that while several factors have moderate positive effects on teacher's feeling about their work, three in particular have moderate negative effects.

As Table 7 shows, the most positive influence on OECS teachers' work is their school management and administration. This scale includes items on management style, professional autonomy and participation, and is this reflective of a relative strength in the school system as seen by its teachers. Curriculum and career and professional development opportunities are also rated as having more of a positive than negative influence.

The factor rated most negatively overall is conditions of service, which includes salary, leave and benefits. Also rated as having a negative influence is students' characteristics, which includes factors related to both the mix of academic abilities within the classroom as well as students' family backgrounds.

Table 7
Determinants of Teacher Commitment by OECS Country
Average scores (standard deviation)

Determinant of Commitment	Total OECS N=486	Anguilla n= 23	Antigua n=52	BVI N=27	Dominica n=69	Grenada n=48	Montserrat n=25	St Kitts/ Nevis n=54	St. Lucia n=110	St. Vincent/ Grenada n= 71
Influence of students' characteristics	2.84 (.68)	2.65 (.62)	2.83 (.66)	3.13 (.61)	3.09 (.76)	2.93 (.68)	2.63 (.58)	2.86 (.67)	2.70 (.68)	2.73 (.63)
Influence of curriculum	3.34 (.72)	3.40 (.73)	3.22 (.82)	3.48 (.72)	3.55 (.63)	3.34 (.62)	3.17 (.59)	3.46 (.59)	3.21 (.83)	3.27 (.68)
Influence of school management and administration	3.45 (.65)	3.40 (.53)	3.39 (.61)	3.62 (.69)	3.69 (.54)	3.26 (.68)	3.04 (.63)	3.51 (.67)	3.51 (.83)	3.35 (.63)
Influence of career and professional development opportunities	3.35 (.77)	3.19 (.65)	3.12 (.88)	3.67 (.66)	3.27 (.77)	3.59 (.66)	3.22 (.67)	3.47 (.67)	3.35 (.82)	3.31 (.74)
Influence of conditions of service	2.44 (.88)	2.52 (.68)	2.26 (.87)	2.76 (.69)	2.66 (.93)	2.40 (.88)	2.70 (.84)	2.36 (.87)	2.51 (.92)	2.15 (.85)
Attitudes to education reform ²	3.14 (.35)	3.04 (.24)	3.07 (.35)	3.18 (.33)	3.11 (.35)	3.10 (.28)	3.11 (.30)	3.17 (.36)	3.20 (.35)	3.18 (.39)

¹ = Influences me very negatively, 5 = influences me very positively, 3= has no influence on me.

² 4 point agree-disagree scale, where a score of 4 is most positive.

In the following sections, we examine the relationships between the determinants of teachers' degree of commitment, as specified in the conceptual framework, and the characteristics of teachers and their schools. These analyses show that there are a number of systemic factors which contribute to determining teacher commitment to teaching and to their schools.

4.7 Gender and determinants of commitment

As Table 8 shows, ratings of levels of influence by the various determinants of commitment to teaching are relatively independent of teacher gender. The only significant difference between male and female teachers is that male teachers rate the influence of conditions of service (salary and leave) as having more of a negative influence on their work than do female teachers ($F(1,477) = 6.5, p < .05$).

Table 8**Determinants of commitment by teacher gender**

Commitment determinant: Mean (standard deviation)	Male Teachers n= 137	Female Teachers n=342
Influence of Curriculum ¹	3.4 (.75)	3.2 (.71)
Influence of students' characteristics ¹	2.8 (.70)	2.8 (.67)
Influence of school administration ¹	3.4 (.65)	3.5 (.64)
Influence of career and professional development opportunities ¹	3.3 (.76)	3.4 (.76)
Influence of conditions of service ¹	2.3 (.88)	2.5 (.88)*
Attitudes to education reform ²	3.2 (.37)	3.1 (.33)

¹1 = Influences me very negatively, 5 = influences me very positively, 3= has no influence on me.

²Higher scores means more positive attitudes toward education reform, on a 4 point agree-disagree scale.

* p < .05.

4.8 School level and determinants of commitment

Table 9 shows that there are several differences between primary and secondary school teachers in their ratings of factors which influence their work. First, secondary school teachers rate the curriculum as having a significantly more positive influence on their work than do primary school teachers. However, primary school teachers rate their school administrations and management ($F(1,473) = 3.7, p < .05$) and opportunities for professional advancement ($F(1, 472) = 3.1, p < .05$) more highly than secondary teachers.

Table 9
Determinants of commitment by school level

Commitment determinant: Mean (standard deviation)	Primary teachers n=300	Secondary teachers n=175
Curriculum ¹	3.3 (.73)	3.5 (.68)*
Influence of students' characteristics ¹	2.9 (.69)	2.8 (.67)
Influence of school administration ¹	3.5 (.65)	3.3 (.62)*
Influence of career and professional development opportunities ¹	3.4 (.77)	3.3 (.75)*
Influence of conditions of service ¹	2.4 (.89)	2.5 (.86)
Attitudes to education Reform ²	3.1 (.34)	3.1 (.36)

¹1 = Influences me very negatively, 5 = influences me very positively, 3= has no influence on me.

²Higher scores means more positive attitudes toward education reform, on a 4-point agree-disagree scale.

* p < .05.

4.9 School location and determinants of commitment

Table 10 shows that there are no significant differences between teachers working in rural and urban schools in their ratings of factors which influence their work.

Table 10
Determinants of commitment by school location

Commitment determinant: Mean (standard deviation)	Teachers in urban schools n=268	Teachers in rural schools n=197
Influence of curriculum ¹	3.3 (.73)	3.4 (.68)
Influence of students' characteristics ¹	2.8 (.68)	2.9 (.69)
Influence of school administration ¹	3.4 (.65)	3.5 (.64)
Influence of career and professional development opportunities ¹	3.4 (.76)	3.3 (.79)
Influence of conditions of service ¹	2.4 (.83)	2.5 (.95)
Attitudes to education reform ²	3.1 (.34)	3.1 (.36)

¹1 = Influences me very negatively, 5 = influences me very positively, 3= has no influence on me.

²Higher scores means more positive attitudes toward education reform, on a 4 point agree-disagree scale.

4.10 Professional qualifications and determinants of commitment

The table below illustrates the relationships between the various determinants of teacher commitment to teaching and students and their level of training. (Because of the small number of respondents with Bachelor's degrees, these results should be interpreted with caution.) Teachers with different levels of training do not differ on these facets of their work.

Table 11
Determinants of commitment by level of professional qualifications

Commitment determinant: Mean (standard deviation)	Untrained n= 122	Trained n = 323	B. Education n =30
Influence of curriculum ¹	3.5 (.72)	3.3 (.72)	3.3 (.74)
Influence of students' characteristics ¹	2.8 (.69)	2.9 (.69)	2.9 (.65)
Influence of school administration ¹	3.5 (.66)	3.4 (.64)	3.5 (.74)
Influence of career and professional development opportunities ¹	3.2 (.86)	3.4 (.75)	3.5 (.60)
Influence of conditions of service ¹	2.5 (.79)	2.4 (.93)	2.6 (.74)
Attitudes to education reform ²	3.1 (.33)	3.1 (.35)	3.2 (.35)

¹1 = Influences me very negatively, 5 = influences me very positively, 3= has no influence on me.

²Higher scores means more positive attitudes toward education reform, on a 4 point agree-disagree scale.

4.11 Multivariate Analyses: Determinants of Teacher Commitment

The analyses in this section examine the relationships between the main outcome variable, teacher commitment, and the entire set of predictor variables. The objective of these analyses is to identify the factors which are most important in determining levels of commitment. These most important factors would then become the most likely targets for interventions aimed at improving commitment and retention, and therefore indirectly, student outcome.

In the multiple regression analyses reported below, all possible predictors were entered simultaneously using stepwise procedures. These include the subscales of levels of teacher commitment as well as the teacher characteristics presented earlier. The variables which are presented in the tables are those which are significant predictors of teachers' commitment, over and above all other variables.

Table 12
Multiple Regression¹: Predictors of Teacher Commitment

Predictor	t (beta) df = 474	significance level	Summary of effect
Influence of career & professional development opportunities	7.1	p < .001	The more positive the influence of career and professional development opportunities, the more committed to teaching
Attitudes to education reform	5.7	p < .001	The greater the awareness and interest in education reform, the stronger the commitment to teaching
Influence of school administration	4.0	p < .001	The more positive the influence of school administration and policies, the more committed to teaching
Level of professional qualifications	3.6	p < .001	The higher the level of professional qualifications, the stronger the commitment to teaching.

¹Overall equation: $F(7,4903) = 298.7, p < .0001. R^2 = .31.$

These results show clearly that levels of teacher commitment are most strongly influenced

by factors which can be subject to intervention by OECS educational systems, and which have in fact been the subject of reform efforts. The most important predictor, career and professional development opportunities, shows that the more opportunities teachers have to expand their skills and abilities as teachers and, if desired, to move upward in a career ladder, the more committed they are to the profession of teaching and to their students. In a similar way, the more positive their attitudes to education reform -- the more interested they are in seeing reforms come to fruition and the greater the role they see for teachers in this process, the more committed they are to teaching.

That the management style of the school administration is also a major influence on commitment to teaching confirms previous findings in the literature. The more teachers feel involved in decision-making within their school, the more professional autonomy their experience in their work, and the more the management style of the school administration is able to create a positive working climate, the more teachers are committed to teaching.

Finally, professional qualifications are also significantly related to teaching commitment, over and above many other variables including conditions of service. More qualified teachers are also more committed teachers; less qualified, especially untrained teachers, are less motivated, less interested in their students, and less likely to remain in the profession.

The negative implications of these findings for students' outcomes cannot be under-emphasized. Improvement across the teaching cadre in these four factors, all of which can be affected by interventions under the direct control of OECS Ministries of Education, will improve OECS students' attitudes toward school, levels of effort in school and academic performance, as well as reducing behavioral problems.

4.12 Multivariate analyses: differences by country

When the preceding analyses are repeated country by country, the results show that although there are differences between countries in the relative importance of the predictors of teacher commitment, the overall pattern is similar. The results are summarized in Table 13, below.

Table 13
Determinants of teacher commitment by country

Country	Most important determinants of commitment in multivariate analyses
Anguilla	Influence of career & professional development opportunities
Antigua and Barbuda	Influence of career & professional development opportunities
British Virgin Islands	Influence of career & professional development opportunities
Dominica	Influence of conditions of service; Influence of curriculum
Grenada	Influence of curriculum
Monsterrat	--
St. Kitts and Nevis	School administration
St. Lucia	Influence of career & professional development opportunities; Attitudes toward education reform
St. Vincent & Grenadines	Attitudes toward education reform, Influence of school administration

4.13 Determinants of attitudes toward education reform

In a final set of analyses, we examined the factors of teachers' work which predict their attitudes toward and interest in education reform. The results of these analyses are shown in Table 14, below. Teachers who rate their career and professional development opportunities and their school administrations more positively have more positive attitudes toward and greater interest in education reform. However, it should be noted that only a small proportion of the variance in attitudes toward education reform can be explained in these analyses.

Table 14
Multiple Regression¹: Predictors of attitudes toward education reform

Predictor	t (beta) df = 474	significance level	Summary of effect
Influence of career & professional development opportunities	3.1	p < .01	The more positive the influence of career and professional development opportunities, the more positive the attitudes toward education reform
Influence of school administration	2.8	p < .01	The more positive the influence of school administration and policies, the more positive the attitudes toward education reform

¹Overall equation: $F(2,472) = 14.6, p < .001. R^2 = .06.$

The following table presents the results of these analyses for each country. Because of the small sample sizes, for several countries no significant predictors were found. However, the results are similar to those found for predictors of teacher commitment.

Table 15
Determinants of attitudes to education reform by country

Country	Most important determinants of attitudes to education reform in multivariate analyses
Anguilla	--
Antigua and Barbuda	--
British Virgin Islands	--
Dominica	Influence of conditions of service
Grenada	Influence of curriculum
Monsterrat	--
St. Kitts andNevis	Influence of school administration
St. Lucia	Influence of curriculum
St. Vincent and the Grenadines	Influence of students' characteristics

Teachers' desired role in education reform

After having rated their views toward education reform in the Eastern Caribbean, respondents to the survey were asked to write in a few words what they felt the role of teachers ought to be in education reform. These responses were coded into five independent categories, and the data summarized in Table 16, below.

It is clear first of all that most teachers feel that they have a role to play in some part of the education reform process. About two-thirds of surveys respondents provided an answer to this question, and none of these stated that they felt teachers had no role or only a minor role. The responses most often given reflect a desire on the part of about one-third of teachers to be consulted or be given an opportunity to provide input, especially about conditions and needs at the level of the classroom. An equal proportion, however, would like have a more active role than merely providing information or input to the architects of the reform. These teachers would like to be involved in planning the changes that will take place, both in terms of broad policy orientations and in the design of curricula and teaching systems. A minority of teachers-- about 15% overall,

but higher in St. Vincent -- wish to see teachers at the helm of the reform, with a strong decisional role.

Table 16
Desired Role for Teachers in Education Reform by OECS country: % of Teachers

Type of work	Total OECS n=324	Anguilla n=12	Antigua n=33	BVI N=16	Dominic a n=44	Grenada n=26	Montser- rat n=15	St Kitts/ Nevis n=38	St. Lucia n=89	St. Vincen t/Grenad. n=51
Be consulted or provide input	36	58	27	56	41	39	27	34	42	14
Be involved in planning or developing reforms	35	33	39	25	34	42	53	32	30	39
Be involved in implementation	9	-	9	-	16	8	7	8	10	10
Have a major, decisional role	14	8	15	-	5	8	7	16	15	28
Advocate for students	7	-	9	19	5	4	7	11	3	10

4.14 Focus group findings

The opportunity to discuss in depth with teachers the issues addressed in the survey questionnaires provided both validation and background to the findings discussed above. We note however, that because participants were volunteers, that we would expect them to be both more positive and committed to teaching than the average teacher who completed the anonymous survey questionnaires.

Teachers' Outcomes: Liking for and Commitment to Teaching

Levels of commitment to teaching varied in these groups. In general, teachers felt quite satisfied with and committed to their work, giving as reasons behind their interest such positive factors as: love for children, pleasure in having and impact on minds of youth, and doing something for one's country. As one teachers stated: *"The greatest joy in teaching is in the future... for example, when one takes students from scratch and mould them into individuals that are perhaps 60% to 80% better than they were before, you take pride in them thanking you when you meet them several years later. This is the ultimate satisfaction derived from the vocation..."*. However, in most cases teachers also had some areas of dissatisfaction in their work: *"As a teacher, I feel both satisfied and dissatisfied ... The conditions under which I have to perform my job, makes me dissatisfied, but I feel satisfied when it comes to exam results"*.

These mixed feelings suggested that most teachers feel that teaching would be enjoyable if some obstacles were remove or minimized, such as low levels of parental support, non-conducive teaching environments, and too many students who did not seem able to cope with the academic demands of the classroom. Moreover, in all of the groups, teachers said that they were aware that some teachers *"are transient, waiting until something better comes along"*. This was said to be a greater problem at the secondary level, where some people *"used the profession as a stepping stone to other jobs and leave at the first available opportunity"*; it was also said to be more characteristics of younger than older teachers. The rapid turnover was said to affect students' choices, especially at the higher levels of secondary school because students tend to opt for subjects taught by teachers who they perceive to be stable and effective. When asked why teachers were leaving the profession, a number of possible reasons were offered, ranging from salary, to lack of cooperation from parents and students, to poor organizational climate within the school and poor rapport with the

administration.

Determinants of teacher outcomes

Teachers in most groups felt strongly that a major factor in determining their level of satisfaction in their work was their capacity to deal with problem students. Generally, teachers felt they were not trained to effectively handle students with behavioural problems or special needs. In one country, it was suggested that teachers who have the aptitude to deal with low achievers should be trained specifically for that purpose, freeing the classroom teacher to deal with students of average ability. These problems were said to be exacerbated in multi-grade classrooms as well as classrooms with too many students.

More generally, the problem of lack of teacher preparedness for teaching was also raised in several groups. Teachers in one group, for example, noted that while they were happy to be teaching and felt that they had the necessary academic qualifications for the work, they felt under-qualified in other ways because “*teaching includes so much more than the academics*”. This was especially true where resource limitations require multi-grade classrooms, which result in inadequate learning opportunities for many students because teachers are ill-equipped to deal with a multi-grade situation.

As suggested above, class size can impact negatively on teachers’ satisfaction with their work. Teachers expressed frustration with their difficulties in controlling large classrooms: “*Double classes, 40 to 50 children with nothing but a chalkboard: its hard to work in this day and age!*”, and with their inability to give all children the individualized attention required. This was of course especially true for slow learners.

Physical environments in classrooms are a major problem for teachers throughout the participating countries. Noise levels, due to poor sound insulation, open spaces or inadequate partitioning between classrooms and traffic all create distractions for students that are exacerbated in crowded classrooms: “*I teach in an auditorium on a stage, with partitions to separate my class from*

another. The other class is so close I could touch the children". Quality of the physical plant was also often mentioned as severely problematic, especially concerning the state of repair and cleanliness in bathroom facilities. Teaching aids, equipment and supplies were described as often woefully inadequate, especially for science and computer courses: *"I have a class of 32 with four, five computers. How am I supposed to teach anything?"*

Concerns were also expressed about the curriculum, which is seen in at least one country as too demanding at the primary levels. CXC preparation was also said to require too much from students and teachers; and in spite of the heavy work load at both levels, students were still not prepared for the world of work. Teachers reported making adjustments to the curriculum as they felt necessary, especially in terms of timetabling. While the content of English curriculum seemed to meet with teachers' approval in terms of being adapted to the Caribbean context, problems were expressed with both the mathematics and science curricula in current use. Many teachers were unhappy with the time that "extra" activities (dance, physical education, healthy lifestyles, etc) take away from time available to devote to the curriculum.

School organization and management were also widely discussed as influences on teachers' levels of commitment. In schools where principals and head teachers encourage participation through discussion and staff meetings, teachers reported feeling a relaxed and open atmosphere: *"Management, yes it matters; at our school, you can talk about anything; it makes it easier. If you have an autocratic style, its harder"*. This level of participation was not, however, universal. The principals' degree of organization, especially as regard scheduling was also said to be important in how smoothly things run in the school: *"My principal is one with foresight! He gives us a calendar of events for the year"*.

Participants in several groups mentioned a desire for more frequent contacts with Ministry representatives, in order to improve communications: *"sometimes, you have to wait: you're unsure from the Ministry's point of view what to do, and it takes a while before a response is provided"*. Unscheduled demands on principals (unscheduled visits by an education officer, responding to Ministry requests and sudden demands) erode the time that principals have to provide adequate academic supervision (especially in schools with many inexperienced or untrained teachers), motivating staff,

and providing leadership.

Employment conditions, including salary, pension and leave were mentioned as issues in only a few groups, and then in only a relatively minor way. Participants appeared to be dissatisfied with low salary levels in relation to other types of work, often requiring fewer qualifications and, in their eyes, of less social value: *“Teachers get a sense of satisfaction when students come back and say ‘That is my teacher’; they show appreciation of what you did for them – but then some come by in their car and say ‘Miss, you want a ride?’”. However, in many cases salary was not a central concern: “Teachers are teachers... some do feel rewarded by the occupation and not the financial level”.*

Professional development opportunities were said in many countries to be a major source of frustration for teachers. In general, opportunities for growth are seen as limited. Few scholarships are available and salaries are often too low to allow teachers to use their own resources to study further afield. Professional days or workshops were cited as being very helpful in helping the teacher focus on his or her weaknesses and on new teaching and learning strategies, as well as providing opportunities to discuss and share with other teachers. However, in some countries these are being cut back; when they are available, often only one staff member will be selected to attend, and the ideas are not necessarily shared. Thus, for many teachers, even the most basic forms of support seem to be often unavailable: *“I’ve been teaching biology for ten years, and for most of that time I’ve been floundering. CXC never send a person to see if we need help. Six years ago, I decided to go to CXC, to learn how to mark papers. Nobody helped me there either, but by listening to them at lunch I learned a few things...”*. And, although many teachers would like to advance in the profession, there is *“no place to move”*. This creates frustration: *“you don’t feel motivated if you always do the same thing.”*

Finally, regarding teachers’ role in education reform, it can be unequivocally stated that although teachers in these focus groups reported seeing booklets, hearing radio programmes, hearing about a new Education Act, hearing that some workshops had been held, or receiving circulars about changing entry ages for grade levels, they were generally very poorly informed about the goals and aims of the Eastern Caribbean education reform. They were eager, however, to participate in changes in the educational process, proving these changes would contribute to the

enhancement of their work in the classroom.

5. Conclusions

The objective of this study of teacher's work and education reform was to shed light on the major factors influencing teachers as agents of successful education reform in the Eastern Caribbean. Its main focus was on teacher morale and commitment, as they are key determinants of students' attitudes toward school, academic performance and school behaviour.

The results of the study confirm empirically some of the gravest concerns about the teaching cadre in the Eastern Caribbean. While on some indicators, the level of commitment to teaching and interest in students are quite positive, fully two-thirds of those surveyed hope to do something other than teaching at the primary or secondary level in five years' time. This in our view clearly illustrates that there is a significant lack of engagement in teaching as a profession throughout the Eastern Caribbean. The implications of this situation for student outcomes are very serious.

Nonetheless, the study was able to identify some of the critical factors that influence teachers' level of commitment. Interestingly, all the main predictors of level of commitment to teaching are factors which are at least theoretically under the control of the education systems. That is, environmental factors such as school location or student characteristics were not important determinants of commitment.

Among the most important determinants of teacher' commitment to their work is the opportunities teachers have for professional development and career advancement. Although the low ceiling on aspirations caused by the short career ladders in the OECS has a dampening effect on teacher morale, many teachers wish to upgrade their skills and achieve more advanced levels of qualifications. As well, many aspire beyond teaching into management positions.

These results are reinforced by the findings on the importance of professional qualifications in determining teacher morale, motivation and commitment. The more qualified teachers are, the more committed they are to their work -- and undoubtedly, the more positive influences they have on those they teach. Level of professional qualification is an important determinant of level of commitment in the multivariate results as well, overriding factors such as gender, curriculum and pay and benefits in its influence on teachers' work.

Another interesting result is the positive influence of school management and administration on how teachers feel about their work. According to the study results, Eastern Caribbean teachers see their school administrations as a very positive factor in their work.

The study also examined the relationships between teacher's work and education reform. Findings from this part of the study revealed that first of all, teachers are keenly interested in the education reform process and see their own role as key to its success. Moreover, those teachers with more positive views on education reform -- those who are most interested in it and who see a greater role for teachers -- are also those who are most committed to teaching as a profession. And, the overall pattern of results suggests that these teachers are those who work in supportive and progressive organizational climates, supported by competent and professional school management, and whose needs are recognized through opportunities for professional and career development.

Action implications

The survey findings were presented to stakeholders in each participating country in a series of workshops held in January 2000. Present at these meetings were representatives of Ministries of Education, teachers and principals' associations or unions where these exist, teachers, school administrators, and parents, and in some countries, representative of public service administrations. After a presentation of the main findings for the overall OECS and for the specific country, stakeholders discussed the implications of the findings for the future of the teaching profession and for teachers' role in education reform in their respective countries. The results of these discussions have been synthesized below.

The survey results, while not completely surprising, were in many cases met with dismay. The extent of the erosion of teachers' commitment to the profession was said by some groups to be to be demotivating and disappointing. However, other stakeholders saw reason for optimism and hope, in that the results show that teachers are concerned about professional development and career growth. Others pointed out that there are many excellent teachers and administrators in the OECS, and that these people are key to achieving improvements in the education system.

It was also recognized throughout these workshops that the issues at the heart of the problems identified in the survey are fundamental and structural. The study results demonstrate very clearly that the problems identified with teacher's lack of commitment and effectiveness can be directly tied to their lack of training as teachers, their lack of opportunities for professional growth within the system, and their lack of adequate support from their school administrations. Redressing these problems will require enormous political will and public investment. But as stakeholders in these workshops pointed out, they cannot be addressed cosmetically, as has been the tendency in previous reforms, if real improvements are to be achieved.

Need for a global human resource strategy for the education system

It was clear to many stakeholders that the results support the necessity of a global approach to improving human resources outcomes through interventions aiming to improve the teaching cadre. Stakeholders recognized that the strengthening of the teaching profession would require a long-term, developmental approach emphasizing increased access to teacher preparation and in-service training, better articulation of career paths within the education system and the necessary professional development resources to support these, as well and the development of succession planning within ministries and schools. Moreover, stakeholders noted that the education system cannot hope to achieve these changes in isolation, but must work with parents and their communities. As part of this, the public's regard for the role of teachers within Eastern Caribbean society will have to be improved.

Workshop participants in most countries emphasized the need for adequate financing of the education system for effective reforms to be achieved and, as a key first step toward this, for greater dialogue with Ministry of Finance officials in workshops such as these. Indeed, these education system stakeholders generally believe that their ministries of Finance are unaware of, and quite possibly disinterested in, the education reform process – because schools do not produce any recognizable “product”.

Need to improve professional development opportunities and recognition

As mentioned above, the survey results show clearly that at a system-wide level, and over and above remuneration issues, professional qualifications are a key factor in building the capacity of the teaching cadre to improve student outcomes. These results go hand in hand with the critical role of career and professional development opportunities and reinforce the need for increased efforts in both the upgrading of qualifications in the teaching force, and the provision for adequate opportunities for professional development. Many Eastern Caribbean teachers would be highly motivated to take advantage of such opportunities if they were available.

At the same time as more professional development opportunities are provided, the reward structure within the educational administration must be adapted to stimulate development rather than work at cross-purposes. A key issue, mentioned in almost all the workshops, was the role of the civil service human resource administration practices in structuring teachers’ conditions of service – a role which in many cases, was felt to be poorly adapted to the specific needs of the teaching profession, especially during a period of reform. These systems tend to reward commitment and excellence within teaching by moving teachers farther away from the classroom or out of the education system completely. For example, teachers’ academic advancement- usually achieved at considerable personal cost and effort – is in many countries not rewarded at the primary level, leading teachers to move into secondary positions and reinforcing the impression that teaching at the primary level does not require qualifications. According to some stakeholders, there are too few “rungs on the ladder” to adequately recognize ongoing professional development. Other argued that recognition criteria should go beyond academic qualification to include

experience. There was general consensus as well on the need for more rigorous, less “ceremonial” performance appraisal systems for teachers.

Need to improve quality of school administration

Another action implication of this study involves the management and administration of schools. The organizational climate and management quality present in Eastern Caribbean primary and secondary schools are important factors in influencing how teachers in those schools react to their work and how well they succeed in maximizing their students' potential. Stakeholders emphasized that accountability within schools needs to be strengthened, so that clear expectations for performance can be established and enforced. Initiatives aimed at increasing school administrations' capacities to support teachers in their work may be highly beneficial.

Need to improve and standardize conditions of service

Although the survey results did not show remuneration and benefits to be important predictors' of teachers' levels of commitment, many workshop participants pointed out that they are important factors in attracting people into the profession. It generally felt that teachers' pay is too low to compete with other sectors of the economy, particularly for men – who are gravely under-represented in the teaching profession. Other forms of incentives, such as study leave or scholarships are rare and difficult for many to access, especially for those with families. In addition, conditions of service – including remuneration, annual leave, pension, etc -- vary greatly among countries, creating perceptions of inequity and disadvantage. A standardized OECS approach to reconciling these differences was recommended.

Need for ways to increase teachers' voice

The survey results confirmed that OECS teachers are concerned about education reform and desire to be involved in it. The main mechanism through which teachers presently can

participate in re-design of the education system is through their institutions and unions; however, some stakeholders felt that these mechanisms might not be sufficient. They called for the development of alternative strategies for teacher involvement, outside the formal institutional structures.

References

- Angle, H. & Perry, J. (1981). An empirical assessment of organizational commitment and organizational effectiveness. *Administrative Science Quarterly*, 26, March. 1-13.
- Ashton, T, Webb, R (1986) *Making a difference: teachers? sense of self-efficacy and student achievement*. New York/London: Longman.
- Bryk, A., Driscoll, M. (1988) *The school as community: Theoretical foundations, contextual influences and consequences for students and teachers*. Madison: National Centre on Effective Secondary Schools, University of Wisconsin.
- Cohen, A. Antecedents of organizational commitment across occupational groups: A meta-analysis. *Journal of Organizational Behavior*, 13, 533-558.
- Conley S. & Levinson, R. (1993). Teacher work redesign and job satisfaction. *Educational Administration Quarterly*, 29 (4). 453-478.
- Delgado-Gaitan, C. (1988) The value of conformity: Learning to stay in school. *Anthropology and Education*, 19, 354-381.
- Epstein, K. (1992) Case studies in dropping out and dropping back in. *Journal of Education*, 174(3), 55-65.
- Firestone, W. & Pennell, J. (1993). Teacher commitment, working conditions, and differential incentive policies. *Review of Research in Education*, 63 (1), Winter. 489-525.
- Gibson, S., Dembo, M. (1984) Teacher efficacy: a construct validation. *Journal of Educational Psychology*, 76, 569-582.
- Lee, V., Bryk, A. & Smith, J. (1993). The organization of effective secondary schools. In L. Darling Hammond, (Ed.). *Review of Research In Education*, 19 (pp. 171-267). Washington D.C.: American Educational Research Association.
- Lee, V., Dedrick, R. & Smith, J. (1991). The effect of the social organization of schools on teachers? efficacy and satisfaction. *Sociology of Education*, 64, July. 190-208.
- Louis, J. S., Marks, H. & Kruse, S. (1996). Teachers? professional community in restructuring schools. *American Educational Research Journal*, 33 (4), Winter. 757-798.
- Mathieu, J., Zajac, D. (1990) A review and meta-analysis of the antecedents, correlates and consequences of organizational commitment. *Psychological Bulletin*, 108, 171-194.
- Meyer, J. P. , Paunonen, S., Gellatly, I., Goffin, D. & Jackson, D. (1989). Organizational commitment and job performance. *Journal of Applied Psychology*, 74 (1). 152-156.

- Meyer, J., Allen, N., Smith, C. (1993) Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 18(4), 538-551.
- Meyer, J., Irving, P., Allen, N. (1998) Examination of the combined effects of work values and early work experiences on organizational commitment. *Journal of Organizational Behavior*, 19, 29-52.
- Mueller, C. Wallace, J. & Price, J. (1992). Employee commitment: Resolving some issues. *Work and Occupations*, 19 (3), August. 211-236.
- Peterson, K. & Martin, J. (1990). Developing teacher commitment. In P. Reyes (Ed.). *Teachers and their workplace: Commitment, performance, and productivity* (pp. 225-139). Newbury Park: Sage Publications.
- Reyes, P. (1990). Organizational commitment of teachers. In P. Reyes (Ed.). *Teachers and their workplace: Commitment, performance, and productivity* (pp. 143-161). Newbury Park: Sage Publications.
- Riehl, C. & Sipple, J. Making the most of time and talent: secondary school organizational climates, teaching task environments, and teacher commitment. *American Educational Research Journal*, 33 (4), Winter. 873-901.
- Rosenholtz, S. (1989). Workplace conditions that affect the quality of commitment: Implications for teacher induction programs. *The Elementary School Journal*, 89 (4). 421-439.
- Rosenholtz, S. (1989). Education reform strategies: Will they increase teacher commitment? *American Journal of Education*, 95, 534-562.
- Rosenholtz, S. & Simpson, C. (1990). Workplace conditions and the rise and fall of teachers? commitment. *Sociology of Education*, 63, October. 241-257.
- Shaw, J. & Reyes, P. (1992). School cultures: Organizational value orientation and commitment. *Journal of Educational Research*, 85 (5). May/June. 295-302.
- Singer, J. & Willette, J. (1996). Methodological issues in the design of longitudinal research: principles and recommendations for a quantitative study of teachers? careers. *Educational Analysis and Policy Evaluation*, 18 (4), Winter. 265-283.
- Smylie, M. (1992). Teacher decision making: Assessing willingness to participate. *Educational Evaluation and Policy Analysis*, 14 (1), Spring. 53-67.
- Vallerand, R., Fortier, M., Guay, F. (1997). Self-determination and persistence in a real-life setting: Toward a motivational model of high school drop out. *Journal of Personality and Social Psychology*, 72(5), 1161-1176.
- Victor, J, Otis, P. (1980). Teacher strength and sensitivity behaviour: attitude and personality

correlates. *Journal of Experimental Education*, 49, 9-15.

Appendices