CJED
CARIBBEAN JOURNAL OF EDUCATION AND DEVELOPMENT

Beginning Teachers as Change Agents–for Sustainable Societies Success and Failure in Educational Reforms: Contrasting Cases from Belize and Jamaica

Zellynne Jennings
The University of the West Indies, Mona

Introduction

The Complexity of the Process of Educational Change

For Cuban (1992), fundamental reforms are those which permanently transform, alter, or completely overhaul the educational process, and are not mere renovations. Many changes have to take place for these reforms to materialize. Fullan (1993) describes educational change as "an overlapping series of dynamically complex phenomena" (p. 21) that are uncontrollable in many respects. Change is not something that can be forced or mandated, he argues. It is non-linear and loaded with uncertainty and excitement, but it also brings with it inevitable problems which we need to learn from; and it involves every person who must see himself as a change agent. The forces that affect educational reform are numerous and unpredictable. They include, for example, the fact that key leaders may leave in the midst of implementation, or funding from international aid agencies may cease. Government policy could also change in the midst of the reform's implementation. In fact, the effectiveness of the implementation stage of the change process is critical for the success of educational reform; and yet it is at this stage that many of the problems are encountered.

Factors Affecting Implementation

Fullan and Stiegelbauer (1991) identify three factors affecting the implementation of a change in terms of characteristics. These characteristics pertain to the change itself, local factors, and external factors which overlap and interact in ways which underscore the complexity of the process of bringing about change in the education system. How users perceive the change influences its implementation. If they perceive change both as necessary and relevant for the community as a whole and as compatible with their values and beliefs and existing practices, then implementation is more likely to be effective. Implementation is also more likely if the change is easy to understand and use, with explicit goals and a clear means of implementation. Doyle and Ponder (1977) refer to the "practicality ethic" of teachers, underscoring the fact that reforms that involve the use of curricular materials need to be practical in the sense that they fit well with the teachers' situation and are of good quality.

At the local or school level, principals need to offer effective leadership and support to the teachers, and this includes ongoing training in the use of the interventions. Schools are not islands to themselves. Their prosperity hinges on the nature of the environment in which

Reprinted with permission: *Journal of Education and Development in the Caribbean, 14*(2), 145–167, 2012
Electronically published 9 July 2024

https://doi.org/10.46425/cjed501013232

Caribbean Journal of Education and Development,
Vol. 1 No. 1 2024
All rights reserved.
© 2024 by the School of Education,
The University of the West Indies, Mona • ISSN 0799-6977

they are located. Harnessing the support and involvement of their wider community thus becomes essential. Government's allocation of resources (e.g., establishing units to monitor implementation), the provision of funds, and technical assistance are some of the external factors that have to be considered.

As it is rarely the case that adequate atention is given to all of the preceding factors, it is not surprising that Fullan (1993) should conclude of education reforms that "there are no resounding successes, and in many ways there is no such thing, given the complexity of change…" (p. 59). Fullan's (1993) conclusion is based largely on evidence from North America and Europe. Does the same apply to the English-speaking Caribbean? In the first place, how is 'success' in educational reform determined?

Measuring 'Success' and 'Failure' in Educational Reform

Whether an educational reform is successful or not depends on the criteria used to measure success. Khaniya and Williams (2004) underscore this point in relation to educational reform in Nepal. Reforms to bring about qualitative changes to primary curricula there were deemed successful by the Ministry of Education using criteria such as im- proved access, improvements in literacy rates, and successful disbursement of funds, but when measured by criteria such as improved learning gains and reduced geographical disparities in learning, the reforms were identified as failures. This is all the more reason why one needs to be specific and up-front about the criteria used to determine success.

Cuban (1998) identifies *longevity* as the single, most commonly used indicator of reform success and adds that this is "not a mere year or two, or a decade, but a quarter or half century of survival" (p. 167). But what criterion is used to assess the success of an innovation or reform depends on who is making the judgement. As Cuban (1998) contends, there are certain innovations that capture the imagination of the people, spread rapidly, and have strong popular appeal (e.g., the use of desktop computers). This mass appeal and atachment by people creates a sense of *popularity* that becomes important in sustaining change. In contrast, policymakers, the media, and administrators often only look at issues of *effectiveness* and *fidelity* to assess the success of a reform. The effectiveness standard is essentially concerned with the extent to which intended goals have been achieved, often determined by students' test scores and performance at external examinations. The fidelity standard is determined by the extent to which the implementation of the reform remains faithful to what the policy initiators originally intended. In contrast, those who have to implement the reform, primarily teachers and principals, invariably adapt the change to suit their particular situation. Thus, the more *adaptable* the reform, the more implementers find it compatible with their needs and fiting well with their situation. As such, implementers often identify adaptability as the most important measure of a reform's success.

Aims of the Study

Altinyelken (2010) observes that cumulative and comparative knowledge of successful and less successful implementation experiences is hardly used to design new reform programmes and as a result the same mistakes are often repeated, particularly in developing countries which can ill afford the wastage of resources. This study seeks to contribute to that cumulative knowledge of experiences in implementing educational reforms in developing countries. Consequently, the main aim of this study is to examine why certain reforms introduced into Commonwealth Caribbean education systems have been successful, while others have failed. This study assessed the success of two educational reforms in Commonwealth Caribbean countries, based on three of Cuban's criteria for which the most available research provides support, namely: longevity, effectiveness, and adaptability. The study ends with some key lessons to be learned for successful educational reform.

The Educational Reforms

The two educational reforms which are the focus of this study have been chosen not only because they contrast two of the Commonwealth

Caribbean countries but also because there is suffcient research evidence from which their success/failure can be determined. These educational reforms are: (i) the Rural Education and Agriculture Programme (REAP) in Belize (1976 to present); and (ii) the Project for the Improved Management of Educational Resources (PRIMER) in Jamaica (1979–1984). Based on the definition of an innovation by Miles (1964), these reforms are both innovative because at the time of their initiation they involved the use of ideas, or practices, which were perceived as new by their users and which were designed to bring about desirable changes. The reforms explored in this paper sought to bring about fundamental changes, including new goals, structures and roles in schools, and changes in organization of curricula.

Methodology

There are several challenges and limitations of the analysis reported in this article. Educational change in Commonwealth Caribbean countries is for the most part project-driven. With each project comes a number of innovations which meet with varied success, but many are lost to us because they are not properly monitored and subjected to evaluation which is systematic, documented, and made public. As a consequence, authors with an interest in educational change may choose reforms with which they are familiar through their own involvement in the project. Herein lies a potential bias. To guard against this type of bias, I recruited multiple, unaffliated, independent judges who could assess the reform from their perspective and experience. The ability to locate as many judges as desired, however, proved problematic for both REAP and PRIMER.

The data for the analysis of each reform is drawn from various sources, some of which are listed in Table 1. The data for REAP is drawn from an evaluation study by Massey (1982), research by Edmond (1985) and Jennings (1988). Independent judgement on the success or failure of REAP was sought from the officer who served as the National Coordinator of REAP in the 1990s and from a top administrator at the University of Belize who was knowledgeable about REAP in its heyday. While there is no evaluation of PRIMER, the author obtained access to reports by the project director (McKinley, 1981). Data also came from Cummings (1986) who reviewed all IMPACT related projects, of which PRIMER was one. Other sources of data focused on specific aspects of PRIMER: the use of self-instructional materials (Minot, 1988) and the use of peer tutoring (Wood, 1983). Independent judgements on the success or failure of PRIMER were sought from two lecturers in tertiary-level institutions in Jamaica who were asked to assess the success or failure of PRIMER, based on the same sources used by the author.

Each source of data was examined for evidence on the achievement of stated objectives as well as for the factors that affect implementation in Table 1. This made it possible for each reform to be described with particular emphasis on its implementation as described by Cuban (1998).

Contextual Background

Jamaica and Belize are part of the Commonwealth Caribbean (CC) which comprises 11 sovereign states and five dependent territories under the United Kingdom. The CC countries have a common history of colonial dependency as slave plantation economies in the British Empire. Most, like Jamaica, gained their independence from Britain in the 1960s, some in the 1970s. Belize became independent in 1981. The CC countries vary in size from being as small as St Kitts/Nevis which has an area of 261 km^2 and a population of less than 43,000, to Guyana which is on the South American mainland with an area of 214,970 km^2 and a population of less than 753,000. While being in no way as large as Guyana, Jamaica is 10,991 km^2 but has a population of 2.8 million. Belize has an area of 23,000 km^2. It is bordered on the north by Mexico, on the west and south by Guatemala and to the east it faces the Caribbean. Its population totals about 287,730 persons, according to the 2006 population census. Although Belize is one of the more depressed of the ex-British colonies in the Caribbean, it is blessed with a cultural diversity unrivalled by any of its neighbours. While the population of Jamaica is mostly of

African descent, the Belizeans are a fusion of Creoles (Afro-Belizeans) who make up about 50 per cent of the population, Mestizos (of Hispanic-Indian origin) who make up about 25 per cent of the population, with Black Caribs (descendants of Africans and Carib Indians) and descendants of the Mayans making up the bulk of the remaining population, with some small groups of Chinese, East Indians, Lebanese, Europeans, Mennonites, and Latin American refugees.

The education systems of the CC countries are historically modelled, for the most part, on that of Britain. Primary education is free and com- pulsory in both Belize and Jamaica for all children between the ages of five and 14 (Belize) and six to 11-plus (Jamaica). In Belize it is based on a British model of academic training, with most of the academic materials coming from Britain or the USA. It consists of eight grades which take the child from Infant 1 (grade 1) to Standard 6 (grade 8). There are 282 primary schools in the country, the majority of which (204) are in rural areas (Ministry of Education, Belize, 2004–2005). Rural children are par- ticularly disadvantaged, with between 40 and 50 per cent of them never able to proceed to further education beyond the eighth grade. Primary education culminates in a primary exit examination. This is called the Primary School Examination (PSE) in Belize. A similar examination in Jamaica is called the Grade Six Achievement Test (GSAT). These exami- nations, like similar ones in other CC countries, are often criticized for being selective devices that determine entry into the prestigious general secondary or high schools which have an academic bias for university entry. In Jamaica, children who fail the GSAT enter non-selective secondary schools with curricula which combine academic and technical-vocational subjects or All-Age (AA) schools which cater to children between the ages of 6 and 15. The AA schools are the 'poor cousins' of the education system, which neither prepares the graduates for work or further study.

Education systems in CC countries can most accurately be described as highly centralized. The content of the curriculum, its organization, method of instruction, as well as assessment at the primary and increasingly the lower secondary levels, is determined by the Curriculum Development Units located within Ministries of Education. Curricular change, involving the development of national curriculum guides or plans, has been the preferred vehicle for educational reform in the CC countries implemented by Ministries of Education. But, given the context-specific nature of curriculum, as Montero-Sieburth (1992) points out, this approach to educational reform fails to recognize that changing the curriculum is but "one feature of an educational process that works in conjunction with a whole series of factors" (p. 175). Teachers are often told to implement Ministry curricular guides to bring about ministry specified reforms, without consideration of the additional factors that influence instruction that are outside the teachers control and influence. Montero-Sieburth underscores the lack of attention paid to contextual influences on curricular change and stresses the need for research in developing countries on curriculum implementation. An examination of educational reforms within developing countries which is more sensitive to contextualized factors influencing implementation will lead to a beter understanding of why some educational reforms succeed and others fail. Altogether, Fullan and Stiegelbauer (1991) identify 15 factors which form a system of variables that interact over time to determine success or failure of schoolchange. The more factors that support implementation, the more likely change will occur; however, the reform process becomes less effective if these same factors work against implementation.

This study examines 13 of these factors as outlined in Table 1.

Analysis of the Educational Reforms

Rural Education and Agricultural Programme (REAP) – Belize

The Belizean economy is centred largely on the sugar industry, citrus farming, and fishing. In the 1970s, eco-tourism was a fledgling industry. Today, it is one of the twin pillars of the economy,

Table 1

Factors that Affected the Implementation of Selected Caribbean Educational Reforms

	A. Characteristics of the Reform	REAP (Belize) (1976–present)	PRIMER (Jamaica) (1979–1984)
1.	**Need and Relevance***: Reform is perceived as relevant to community/societal needs.*	√	#
2.	**Compatibility***: Reform is perceived as compatible with values, existing practices, etc.*	#	#
3.	**Complexity***: Reform is perceived as diffcult to understand and use.*	√	√
4.	**Clarity***: Goals of reform are clear to users and means of implementation made explicit*	#	X
5.	**Quality and Practicality***: Programme materials are of good quality and practicable*	X	X
B.	**Characteristics at the School Level**		
6.	**Leadership***: Principals offer good leadership*	√	X
7.	**Training***: Adequate and appropriate training of teachers and principals.*	#	X
8.	**Community Support***: The community is involved and supportive.*	√	X
C.	**Characteristics at the National Level**		
9.	**Evaluation & Research***: Provision for continuous monitoring and evaluation.*	√	X
10.	**Government Support***: Advocacy/support at ideological level/ provision for continuing funding.*	√	X
11.	**Lead Time for Materials Development***: Realistic time span for materials development.*	√	X
D.	**Characteristics External to the National Level**		
12.	**Funding by Donor Agency***: Realistic time span for funding.*	√	X
13.	**Technical Assistance***: Provision of International/local technical assistance.*	√	X

Key: √ = present X = absent # = present to some extent

Research Evidence: Massey, 1982; Edmond, 1985; Jennings, 1988; McKinley, 1981; Minot, 1988; Jennings, 1993; Wood, 1983.

the other being agriculture. The country's wealth lies in its land. Although some 40 per cent of the country is arable, only about 10 per cent of the land suited to agriculture is in use. As a result, there is a dependency on foreign imports which causes a drain on the national economy. In the 1970s, subsistence farming, inadequate public services, and high levels of unemployment contributed to an exodus from rural Belize to the towns and the old capital, Belize City. To stem this tide, the Government of Belize decided to orient its primary education system to agriculture in an effort to harness this potential wealth and stem the tide of urban migration.

As pointed out earlier, rural primary school children were at a particular disadvantage and so there was clearly a need for reform at the primary level to improve the life chances of these young people.

The main aims of REAP were to prepare rural children in Belize for a more rewarding life in the countryside and to enable them to participate in the development of the agricultural basis of the national economy to the mutual benefit of themselves and the nation. These aims were to be achieved through the development of a new curriculum *relevant* to rural Belizean life, and the retraining of teachers with a rural development orientation and with skills in curriculum integration. In addition, school farms were to be set up to serve as outdoor laboratories (Jennings, 1988).

Funding and technical assistance were made available to REAP from its inception because it was initiated by a unique intra-ministerial and international agency group comprising representatives from the Ministries of Education and Sports, Social Welfare, and Natural Resources (agriculture), The Cooperative American Relief Everywhere (CARE), Heifer Project International (HPI), and the United States Peace Corps, a group that later formed the REAP Advisory Commitee.

Initiated in 1976, REAP was planned so that within a ten-year period it moved from a dependency on support from international aid agencies to being locally managed by District Councils. During the pilot phase (1976–1979), the international aid agencies provided the bulk of the technical and material assistance and logistical support needed. REAP was piloted in eight primary schools in three of the six districts and in one secondary school. In addition, a special training programme was developed for teachers being prepared for REAP schools at the Belize College of Education (BCE). An Outdoor Education Centre (ODEC) was constructed in each pilot school. These consisted of a new building, garden, crops, rabbit hutches, and other necessities for the practical application of learning in an agricultural seting. HPI supplied, at cost, feeders, wire, chicks, baby rabbits, and some feeds. The Peace Corps volunteers served both a technical support/coordination role in the primary schools and as lecturers for the BCE REAP programme. CARE supplied tools, equipment, some agricultural supplies, transportation support, and some financial assistance in the construction of the ODECs. Government support came through the Belize Ministry of Education which took responsibility for the training of both teachers and principals in the pilot schools and supplying an education offcer to manage the project.

Training was done largely through workshops which focused on strengthening the agricultural skills of the teachers, the writing of performance objectives and curriculum integration. Learning Activity Packs (LAPs) were developed at these workshops. LAPs are outlines of lessons for appropriate grade levels in which teachers are given performance objectives related to a REAP area of study, suggested activities and instructional materials. The LAPs were developed around nine areas of study: land and water, soil, health and nutrition, ecology, animals, village study, weather, plants and agricultural practices. These served as 'threads' to integrate the academic subjects —language arts, mathematics, social studies, science, the arts, and religion.

To what extent was REAP successful? REAP is in fact regarded as one of Belize's success stories in educational reform in the 1980s. It fares fairly well on Cuban's (1998) effectiveness criterion as it stunted urban migration in rural areas, and increased agricultural production in rural areas while maintaining high student achievement. Edmond (1985) found that teachers and students, in both REAP schools and those not in REAP schools, had more positive atitudes towards agriculture after the reform. This was reflected in the way in which teachers in REAP schools saw the reform as giving students a sense of dignity in physical labour, a better idea of agriculture, and enabling students to become self-employed while helping their families to obtain and prepare more nutritious and healthier diets. This contrasts with teachers in non-REAP schools who emphasized how parents complained when their children got dirty and questioned what

job opportunities would be open to the REAP graduates in the wider world. From a sample of REAP graduates, 80 per cent of them remained in rural Belize, mostly working on citrus farms, but some were involved in handicrafts while those who migrated to the city went in search of work. When asked about the value of the programme, the graduates emphasized how self-sufficient they had become in that they knew how to grow foodstuffs for their family's consumption and how to sell the excess (Edmond, 1985).

One of the independent judges for REAP supported the findings of Edmond and atributed the success of REAP to its providing students with "lifelong learning" that enabled students "to develop an appreciation for backyard gardening, thereby reducing their parents' expenses on vegetables and chickens. Because of the presence of the programme in the schools, the youngsters saw a connection between what they did at school and what was done at home." A second judge described REAP as "a very good programme as it instilled an appreciation in students for agriculture and the environment at an early age".

A second objective of the REAP programme was to develop and utilize the natural agricultural assets of the rural regions in the country. REAP seems to have contributed to the national economy in that evidence has been provided that increases in local food production, since the inception of REAP, have occurred in these areas (Massey, 1982). A third objective of the REAP reform was to ensure that students' academic knowledge and skills were integrated into the agricultural curriculum. An evaluation of exam results for the Belize National Primary Education (BNPE) examination, which is used to determine which students gain entry into secondary schools at approximately age 11, found that REAP students performed as well as non-REAP students in the exam. Because the BNPE is an academic examination which tests achievement in English and Mathematics, the fear was that the focus on agriculture in REAP would impact negatively on the performance of the children in this examination. One of the independent judges atributed the performance of the REAP students in the BNPE to the fact that "they were beter able to apply skills as it [sic] was not abstractly taught to them".

In addition to effectiveness, REAP can also be assessed favourably in regard to adaptability. When the programme was expanded to all six districts, a formative evaluation identified problems experienced by the project schools that were a result of particular circumstances within each district. In response, REAP District Councils were established, empowered to adapt REAP to suit their particular district circumstance. Because of limited land space for agricultural production, REAP underwent further adaptation when urban schools joined the programme in 1984. The meaning of the acronym was changed to Relevant Education for Agriculture and Production in recognition of the different entrepreneurial activities (e.g., craftwork) that urban schools could engage in to be productive. The operative word here is "could" which implies choice on the part of the schools. One of the independent judges considered this a weak element in REAP and wrote, "I believe that its [i.e., REAP's] failure was due to the lack of a national policy to enforce and implement REAP in all schools".

REAP meets the longevity criterion because it survived over 20 years before it was replaced by a National Comprehensive Primary Curriculum developed between 1999 and 2001. This is described as a child-centred curriculum using an interdisciplinary approach to the teaching of subjects (Lewis, 2007). This includes science, but not agriculture. But according to Lewis, REAP still survives today in a few rural schools which have District Councils that cherish the principles on which it was built. The key reasons given by the independent judges as to why REAP fell into a decline are the lack of funds and "because the reality of self- sustainability was not introduced to the teachers and administrators of schools. Community involvement should have been an integral part of the programme so that a dependence on foreign aid would have been discouraged".

Project for the Improved Management of Educational Resources (PRIMER)–Jamaica

PRIMER was influenced by the Project for Instructional Management by Parents, Community and Teachers (IMPACT) which was introduced in the Philippines in 1974. Other IMPACT-related projects were introduced between 1978 and 1982 in Malaysia, Liberia, and Bangladesh. In Malaysia, for example, the project was known as INSPIRE (Integrated System of Programmed Instruction for Rural Improvement). Initiated against the background of acute problems in rural education, including overcrowded classrooms, the inflexibility of conventional school schedules and the fact that teachers accounted for in excess of 80 per cent of per pupil costs in conventional schools, IMPACT sought to improve educa- tional quality and reduce the per pupil cost of education. The later was achieved in the Philippines by a radical increase in the student-teacher ratio up to 200:1. Encouraged by evidence of the superior achievement in language and mathematics by IMPACT's students over non-IMPACT students (Tugade, 1978) and IMPACT's cost-effectiveness in reducing per pupil cost by as much as 40 per cent (Tullao, McMaster & Tan, 1983), five Jamaican educators visited the IMPACT sites in the Philippines. They rejected the cost-saving component of increasing student-teacher ratio due to the strong objections of the teachers' union. But PRIMER adopted other ideas from IMPACT such as the use of 'programmed teachers', that is, older primary school pupils who taught specific lessons in language and mathematics to younger pupils and the use of self-instructional materials (SIM) in the upper primary grades (4–6). The school's community was also involved in the formal educational process (e.g., as teachers' aides).

PRIMER had three major objectives: (i) to help primary school pupils atain higher levels of achievement in literacy and numeracy; (ii) to raise the pupils' level of self-confidence, improve their ability for self assessment and help them develop atitudes of independence and interdependence; and (iii) to increase community involvement in formal educational processes (Overview of the Project and Progress Report No. 1, Ministry of Education, 1980). Funded by Canada's International Development Research Centre (IDRC), PRIMER was designated an experimental research project in primary education. It was implemented in the 1980s in five rural All-Age (AA) schools in a rural parish in Jamaica. Five other AA schools with similar characteristics to the project schools and which were located in the same geographical area were designated as control schools. There were plans to conduct formative evaluations to provide information on the outcomes of the project (Jennings, 1993).

The goals of PRIMER were consistent with needs identified in the Jamaican Education Plan for 1978–1983. For example, the plan noted that "approximately 53% of the children aged 11 years are not achieving at acceptable standards in literacy and numeracy" (Ministry of Education, Jamaica, 1977, p. 32). Also noted was the need to address "a general lack of community interest and involvement at the primary level" (Ministry of Education, Jamaica, p. 56). From the planners' perspective, PRIMER was therefore relevant to the needs of Jamaican primary education. Minot (1988) found that the users in the project schools were not so positive about the need and relevance of PRIMER. For example, the teachers expected the project to respond to their personal needs and expressed disappointment in not geting recognition for the extra work they had done. The principals were disappointed because the project had not 'put their schools on the map' and once members of the community saw that the government was not constructing new buildings as promised, the initial support they gave in terms of cleaning and painting the school buildings ceased.

While the teachers felt that the use of SIM was compatible with certain values they cherished (e.g., the development of independent study skills), they themselves were reluctant to give pupils the opportunity to work independently. They used the SIM more like a textbook, because they felt that pupils left to work on their own would waste time and cheat by checking the answers at the back of the SIM. The pupils themselves had

difficulty working independently on the SIM due to high noise levels in their schools. A typical rural project school consisted of two large rooms shared by several classes each separated by a chalkboard. The classrooms were also dark. Only one of the five project schools had electricity.

It did not help maters that the reading materials developed were poor in quality and practicality because they were found to be way above the level of most of the fourth-grade pupils, since some 80 per cent of them were reading two or more grade levels below. A remedial reading programme was developed to address this problem, but the situation proved too complex for the teachers who kept moving groups of pupils from the remedial readers to the SIM, depending on how the pupils coped. The project team seemed unable to make clear to the teachers how they could move out of what the team leader described as "organizational chaos" (McKinley, 1981, p. 11).

The PRIMER team was dissatisfied with the leadership of the principals. They considered them unsupportive, only paying 'lip service' to the project and failing to give the teachers the support they needed, especially as some of the teachers were not trained. But the team's training of the teachers to implement PRIMER was also inadequate. Cummings (1986), for example, reported that the teachers were given ten days' orientation in the use of SIM. The teachers, in turn, perceived the project team as highly critical of them, bent on assessing rather than helping them. The relationship between the team and the project schools' staff was likened to "a batle being waged" (Minot, 1988). Constant pressure on the project team exacerbated the situation. The team never had its full complement of staff. The evaluator, appointed at the beginning of the project, resigned and was not replaced, so no evaluation of the project was done. There was no editor and members of the team, having to perform multiple functions, never did anything well. IDRC officers suggested that foreign technical assistance should be hired, given the difficulty in hiring local talent, but the project team leader ignored the suggestion (Cummings, 1986).

Based on the longevity, effectiveness and adaptability criteria, PRIMER cannot be deemed a success. In fact, while other IMPACT-related projects were successful, "only in Jamaica was the project closed down following the original experiment" (Cummings, 1986, p. vii). The key reasons highlighted by the independent judges for PRIMER'S failure were weaknesses in project design, lack of provision for sustainability, and weak institutional and management capacity for implementation. They highlighted the fact that it was "donor-driven and as such did not benefit sufficiently from a local input in its design", and the absence of "mechanisms for financial sustainability" and an "enabling policy support for the continuation of the project". Quite aptly, one judge concluded that "the successful outcome of the project hinged heavily on stakeholder commitment. Thus, efforts should have been made to secure the neces- sary 'buy-in' so that the stakeholders could feel that they are owners of the project."

Planning for Successful Educational Reform: Some Lessons Learnt

Some of the lessons learnt from the analysis of these two educational reforms support findings by researchers such as Fullan (1993) and Fullan and Stiegelbauer (1991); for example, the need for community support which was strong in REAP but weak in PRIMER, and trained staff to support the reform which is also critical for the success of an educational reform. In the planning of REAP, for example, study of REAP was made mandatory for all students at the Belize College of Education (BCE) as a way of ensuring that there was a continuous supply of teachers trained in the skills needed to support the programme. In contrast, training in PRIMER was described by the team leader as "brief", (McKinley, 1981, p. 27), and not the approach to implementation which, according to Fullan (1993), needs to combine teacher-specific training activities, ongoing continuous assistance and support during the process of implementation with regular meetings with other teachers and staff.

The need for adequate lead time for the development of materials which are of good quality

and practicable is also borne out by this analysis, but the experience of PRIMER underscores that this alone is not sufficient. The reading levels of the users of the materials must be accurately diagnosed. The PRIMER team took about one year to write the self- instructional materials for language arts, but they did this before they had the results of a diagnostic test of the students' reading ability. This was clearly a case of 'more haste less speed' because the inability of most of the children to use the materials led to further complications in the reform process.

The need for planners of educational reform to ensure stability of funding is also evident in the reforms examined. Funding cuts or losses is one of the "environmental turbulences" (Miles, 1983) which threaten the sustainability of educational reforms. PRIMER fell victim to this threat because once the IDRC funds had ceased there was no atempt to secure alternative sources of funding. In contrast, the collective effort of the Government of Belize and international agencies contributed to the level of success achieved by REAP during its first decade, even though funding became a problem once the support role of these international organizations was transferred to the initiatives of District Councils (Massey, 1982).

Space permits some elaboration on only three more key lessons from this analysis. These relate to the importance of context in educational reform, adaptability as a characteristic of educational reform, and the importance of leadership and advocacy.

The Importance of Context

New ideas work well in one context and fail miserably in another. It is unlikely that REAP would have survived in other parts of the Caribbean where negative attitudes towards agriculture have long persisted. Bacchus (1975), for example, showed how curricular reforms in secondary schools in Guyana aimed at influencing students' occupational choices in technical and agricultural fields considered more relevant to the needs of the country, met with opposition from students (and their parents) who preferred the 'irrelevant' Western-type academic curricula which, in their view, afforded them the route to economic mobility. The study on agricultural education and work experience programmes by Jennings-Wray (1982) highlighted similar negative atitudes to practical/manual work in Jamaica. In Belize, however, labour on the land never acquired the stigma atached to it in other parts of the Commonwealth Caribbean. In fact, in rural Belize, the *milpa* or small subsistence farm is still seen as an avenue to economic stability since any other form of occupation in the rural areas is hard to come by. REAP, therefore, reinforced already existing positive atitudes towards the land in rural Belize.

The fate of PRIMER also underscores the importance of context. Teachers are accustomed to a didactic approach to teaching (commonly referred to as 'chalk and talk'). They are the 'sages on the stage' and were reluctant to share the platform with the peer tutors. Wood (1983) con- cluded that the use of older children to assist the teacher in atending to the younger children can be effective in promoting learning, but the attempt in PRIMER was unsuccessful. The teachers saw peer tutoring as yet another burden imposed on them. Furthermore, while a radical increase in the student:teacher ratio to 200:1 worked well in IMPACT in the Philippines, such a strategy was intolerable to the teachers' union in Jamaica and could not be incorporated into PRIMER. Implementation strategies for other IMPACT-related projects differed in many ways from that of PRIMER because of contextual differences. For example, while international technical assistance was given to the other projects, the IDRC did not initially consider it necessary for Jamaica to receive such assistance since Jamaica "had a large reserve of trained and capable educators who could advance such a project to completion" (Cummings, 1986, p. 10). And yet, the PRIMER team suffered from a shortage of staff and was unable to replace the evaluator who resigned. The project director of PRIMER had to double as editor of the materials, as compared with Malaysia's INSPIRE which produced the best quality materials of all the projects (Cummings,

1986) and this was because Malaysia selected outstanding teachers to write the materials and had an editor who would return the materials several times to the writers for improvements.

Adaptability in Educational Reforms

Educational reforms are rarely implemented exactly as their initiators intended (fidelity perspective), but rather, as McLaughlin (1976) pointed out, they undergo a process of mutual adaptation wherein the reform is adjusted to suit the situation of the users and the users themselves adapt their behaviour and practices to accommodate it. This position is supported in much later research which examined fidelity implementation of a new curriculum model in the American school system (Shaughnessy, 2015). Drake and Sherin (2006) examined ways in which teachers used a mathematics, reform-based curriculum to identify paterns in the curricular adaptations they make. They found that adaptations ranged from changing the order of activities, modifying the materials used, to changing the amount of time spent on an activity or omiting or adding a particular problem. Roofe-Bowen (2007) found that grade one teachers in Jamaica adapted the guide for the Revised Primary Curriculum to suit their particular situations. REAP was adapted by District Councils to suit the unique situations in the district and it was also adapted to suit situations in urban schools.

The Need for Leadership and Advocacy

The leadership role played by the principal is critical to the success of any reform, and of particular importance is the on-going support necessary for teachers during implementation. While principals were generally supportive in the case of REAP, the PRIMER team described the principals in the project schools as unsupportive. But leadership at the school level is not sufficient. What is of critical importance to the success of an educational reform is advocacy at the national level. REAP was particularly strong in the 1980s because of the ideological support it received from the government of Belize, more specifically, the People's United Party (PUP) which formed the government at the time that REAP was initiated. The democratic socialist ideology of the PUP supported the integration of study with the world of work and was fervent in its support for the rural poor. In the Minister of Education of the day, REAP had its strongest advocate. This it lost when the PUP, which had ruled Belize for more than 30 years, lost power in the elections of 1984, but even then it did not suffer the fate of PRIMER because REAP was sustained for some time under the new government.

PRIMER suffered from changes in the political scene which took place almost as soon as the negotiations with IDRC were complete. Persons who could have helped PRIMER were removed from their positions of influence. In October 1980, the democratic socialist government of the People's National Party was defeated by the Jamaica Labour Party. While the new Minister of Education voiced support for PRIMER, the project, like so many other educational initiatives introduced by the former ad- ministration, was left to suffer from benign neglect. Unlike Malaysia's INSPIRE, which had the strong support of the vice chancellor of the university which served as INSPIRE's base, PRIMER had no one to serve as its advocate. The project director had neither the power nor the influence and soon became trapped in the quagmire of ill feeling in the schools.

Conclusion

Notwithstanding the concerns of Khaniya and Williams (2004) about the appropriateness of criteria for success of educational reforms, it is clear that most educational reforms are not outright successes. This was evident in the way that an independent judge would describe an educational reform (e.g., REAP) as a success at one point and then as a failure when it was superseded by a new mandated curriculum. Educational reforms succeed to varying degrees, as Table 1 shows, and are adapted and changed over time. Educational reforms which have this feature of adaptability are more likely to be sustained. But this analysis has also underscored the importance of advocacy. Someone needs to

champion the reform by not only persuading the people of its relevance and value but also ensuring stability of funding. Advocacy does not have to take place on a platform. It can exist in the mere involvement of high-profile institutions, as in the case of the BCE in Belize.

Some reforms, however, seem born to die. This paper has provided one example. PRIMER did not succeed because the supports that were needed for it to be implemented successfully were simply not there: the users being convinced of its need and relevance, provision of good quality materials, lead time for materials development, provision for evaluation, principals' support for the teachers, and the lack of stakeholder commitment. But it was also caught mid-stream in the tide of political change and was not buffered against the whims of politicians bent on burying the policies and achievements of their predecessors.

The independent judges emphasized three other standards of success which should not be overlooked. The first relates to power coercion on the part of governments. That PRIMER was never mandated by the government was a reason atributed for failure by one of the judges. That there was no mandate for it to be implemented in all schools resulted in many urban schools choosing not to implement REAP. The second standard is partnership, preferably with high-profile partners. REAP, in its early days, found partners in CARE, HPI and the US Peace Corps, but after their withdrawal had to rely on local District Councils. PRIMER had no partners, not even in the local community. PRIMER also suffered from the absence of the third standard highlighted by the independent judges/ stakeholder commitment. Because it was donor-driven, stake- holders never 'bought in' to it nor developed a sense of ownership. REAP suffered from the same fate in many communities, but especially in the urban areas. In addition to those put forward by Cuban (1998), power coercion, strategic partnerships and stakeholder commitment/ownership are standards for success that need to be considered in future analyses of educational reforms.

A final question, however, needs to be asked. Is there not a moral dimension to an educational reform that fails? PRIMER targeted the rural poor and thousands of Canadian dollars were invested in trying to improve the educational chances of the impoverished in the Jamaican society. The fact that evaluation and research was not built into this project has the effect of absolving all concerned from accountability. Yet no project leaves the schools in which it is implemented unscathed. What happened to the teachers and principals in the PRIMER schools during and after its termination? How were their relationships affected? Most importantly, how did the project's failure impact on the children in those schools? Did we stand by and watch as they vanished into oblivion along with the project? We should have answers to these questions. We should be more accountable for what happens in all our schools, but even more so in schools where educational reforms fail.

Zellynne Jennings, PhD is Professor Emerita, The University of the West Indies. She is a former Director of the School of Education at The University of the West Indies, Mona. Professor Jennings holds graduate degrees in Education with specialised study in Curriculum Development and Educational Philosophy. She has published widely in international academic journals. Her latest book is *Re-visioning Change: Case Studies of Curriculum in School Systems in the Commonwealth Caribbean*, (UWI Press, 2022)

Email: zellynne.jenningscraig@uwimona.edu.jm

References

Altinyelken, H. K. (2010). Curriculum change in Uganda: Teacher perspectives on the new curriculum. *International Journal of Educational Development*, *30*(1), 151–161.

Bacchus, M. K. (1975). Secondary school curriculum and social change in an emergent nation. *Journal of Curriculum Studies*, *7*(2), 99–121.

Cuban, L. (1992). Why some reforms last: The case of the kindergarten. *American Journal of Education*, *100*(2), 166–194.

Cuban, L. (1998). How schools change reforms: Redefining reform success and failure. *Teachers' College Record*, *99*(3), 453–477.

Cummings, W. K. (1986). *Low-cost primary education: Implementing an innovation in six nations*. Ottawa, Canada: International Development Research Centre.

Doyle, W., & Ponder, G. (1977/78). The practicality ethic in teacher decision- making. *Interchange*, *8*(3), 1–12.

Drake, C., & Sherin, M. G. (2006). Practicing change: Curriculum adaptation and teacher narrative in the context of mathematics education reform. *Curriculum Inquiry*, *36*(2), 153–187.

Edmond, D. (1985). *The influence of Belize's REAP programme on atitudes to agriculture and rural employment*. Unpublished B. Ed. study, The University of the West Indies, Mona, Jamaica.

Fullan, M. (1993). *Change forces*. London, England: The Falmer Press.

Fullan, M., & Stiegelbauer S. (1991). *The new meaning of educational change*. (2nd ed.). London, England: Cassell.

Jennings, Z. (1988). Belize's REAP programme. *Prospects, XV111*(1), 115–125.

Jennings, Z. (1993). The non-institutionalization of the use of self-instructional materials in primary schools in Jamaica: The case of Project PRIMER. *Journal of Curriculum Studies*, *25*(6), 527–542.

Jennings-Wray, Z. (1985). Agricultural education and work experience programmes in schools in a Third World country: What prospects for human resources development? *Comparative Education*, *18*(3), 281–292.

Khaniya, T., & Williams, J. H. (2004). Necessary but not suffcient: Challenges to (implicit) theories of educational change: Reform in Nepal's primary education system. *International Journal of Educational Development*, *24*(3), 315–328.

Lewis, E. (2007). *Teachers' perceptions of the complexity of the National Comprehensive Primary Curriculum and its difficulties in use in some primary schools in the Stann Creek District, Belize*. Unpublished M. Ed. study, The University of the West Indies, Mona, Jamaica.

Massey, R. M. (1982). *A six-year formative evaluation report (July 1,1976 to June 30, 1982) of the Rural Education and Agriculture Programme (REAP)*. Report to CARE and the REAP Advisory Commitee.

McKinley, L. (1981). Adaptation of IMPACT's instructional and training methods in PRIMER. In *Teaching Yourself in Primary School*. Report of a seminar on self-instructional programmes, Quebec, Canada, May 12–15.

McLaughlin, M. W. (1976). Implementation as mutual adaptation: Change in classroom organization. *Teachers' College Record*, *77*(3), 339–351.

Miles, M. B. (Ed.). (1964). *Innovation in education*. New York: Teachers' College, Columbia University.

Miles, M. B. (1983). Unraveling the mysteries of institutionalization. *Educational Leadership*, *41*(3), 14–22.

Ministry of Education, Belize. (2004–2005). *Education Statistical Digest of Belize*.Belize City: Planning and Project Unit. Ministry of Education, Jamaica. (1977). *Five-year Education Plan,* 1977–1983. Kingston, Jamaica: Author.

Ministry of Education, Jamaica. (1980). Progress PRIMER Progress Report No. 2. January-September 1980.

Minot, B. H. (1988). *A study of the institutionalization of an innovation: The use of self-instructional materials in Project PRIMER*. M. A. (Education) thesis, The University of the West Indies, Mona, Jamaica.

Montero-Sieburth, M. (1992). Models and practice of curriculum change in developing countries. *Comparative Education Review*, *36*, 175–193.

Roofe-Bowen, C. (2007). *The Revised Primary Curriculum in Jamaican primary schools: Grade one teachers' level of use and concerns*. Unpublished PhD thesis, The University of the West Indies, Mona, Jamaica.

Shaughnessy, M. F. (2015). An interview with Amy Azano: Fidelity of implementation. *World Journal of Educational Research*, *2*(1), 1–5.

Tugade, M. A. (1978). An evaluative study of Project IMPACT. *Innotech Journal*, *2*(1), 30–40.

Tullao, T. S., Jr., McMaster, J. C., & Tan, E. A. (1983). Cost effectiveness analysis of Project IMPACT for the Philippines. In J. B. Socrates (ed.), *The IMPACT system of mass primary education*. Manila, Philippines: INNOTECH.

Wood, R. (1983). *Project PRIMER Research: Study 2: Evaluation of the Tutoring System. Final Report*. Mona, Jamaica: The University of the West Indies.