Theoretical Insights into Curriculum Reform in Botswana

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Abstract

This paper examines the technicist approach to curriculum innovation and argues that the approach is wanting in that it ignores a number of important factors. These factors which determine whether an innovation will succeed or fail include: the characteristics of the innovation, local factors, external factors, and the importance of the context and culture. These are exemplified by what has happened to the Botswana General Certificate of Secondary Education given recent curriculum and assessment innovation. The results of this study clearly demonstrate that the above factors are crucial if curriculum reform is to achieve its desired objectives. This study concludes that because local context and culture, such as teacher-dominated classroom cultures and the availability of material resources in schools, are usually not taken into consideration, curriculum reform often fails.

Keywords: Curriculum, Innovation, Curriculum reform, Curriculum implementation, Curriculum assessment.

Reference to this paper should be made as follows:

Nkosana, L. M. (2013). Theoretical Insights into Curriculum Reform in Botswana. *International Journal of Scientific Research in Education, 6*(1), 68-75. Retrieved [DATE] from http://www.ijsre.com

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INTRODUCTION

The traditional framework for understanding educational reform or pedagogical change has been the technicist paradigm. Teachers' classroom practices have thus tended to be explained in terms of technical issues only. Likewise, teachers' failure to adopt pedagogical innovation has been attributed to technical issues such as poor teacher training programs leading to poor teacher quality, a lack of resources, and poor examinations, among others. Measures taken to address the problems associated with teaching have also tended to be technicist in nature involving massive investments of time and resources in teacher in-service programs, workshops and seminars, all aimed at changing classroom teaching practice. While this paradigm is useful, to some extent, in explaining educational reform, it is not adequate as it ignores the wider social context that influences the locus of pedagogical change.

The main problem with the technicist approach is its implication that teaching is a value-free, objective activity whose problems are solvable through the application of the rigorous procedures of the scientific method (Senge, 1990; McNiff, 1988; Smyth, 1991; Tabulawa, 1997; Tabulawa, 1998). Schon (1983, p21) has referred to this technical rationality as the "view that …professional activity consists in instrumental problem-solving made rigorous by the application of scientific theory and technique". This input-outcome model of curriculum, which is typical of the empiricist/positivist tradition, renders pedagogic reforms far less problematic than they actually are.

This paper posits that the technicist input-output model of curriculum development, typical of the technicist approach to educational change, tends to ignore the wider social context that influences the locus of pedagogical change. Tabulawa (1997) has problematized current pedagogical processes by contending that the teacher-centred pedagogical style and classroom organization in Botswana schools is a product of social, economic and historical forces, and has evolved over a long period of time. This style, as suggested by Tabulawa (1997), now constitutes the taken-for-granted classroom world and is so rooted in educational institutions, it is almost a tradition. The fact that these teachers are working within a certain incomplete paradigm makes educational reform a mammoth and daunting task.

Fullan (2001) asserts that educational reform is more than just putting into place the latest policy as it involves changing the cultures of classrooms, schools, school districts, universities and the education system as a whole. Fullan (2001) further argues that the main reason innovations fail on any scale, and are not sustained when they do initially succeed, is that the infrastructure is weak or serving a different agenda. Infrastructure in this context includes the layers above the unit in question. A teacher, for example, cannot sustain change if he/she is working in an opposed culture, in the same way that a school can initiate and implement change but not sustain it if it is operating in an unhelpful district. The district cannot continue to innovate if it is working in a state or country that is not helping to sustain the reform.

Often times the culture of schools in an education system can work against reforms. As studies on Botswana classrooms have indicated, the prevailing pedagogic style, a teacher- centred style, can work against reform, especially if the proposed reforms are incongruent with the dominant approach (Alverson, 1977; Botswana, 1977; Fuller, 1991; Prophet & Rowell, 1990; Fuller, Snyder, Chapman, & Hau, 1994; Tabulawa 1997; Yandila, Komane, & Moganane, 2003). In such a system or context, even those at the core of the reform may act in ways that slow or obstruct the reform. For Fullan (2001), there are a number of factors in the implementation process that need to be carefully considered if reform is to succeed and become institutionalized. These factors are: 1) the characteristics of the innovation, 2) local characteristics, and 3) external factors.

The Characteristics of the Innovation

The characteristics of innovation include issues such as need, clarity, complexity, and quality or practicability. Need involves asking oneself whether the main players, such as teachers, see the need for the advocated change and how urgent they consider this need to be compared to other needs. Clarity refers to how clear the goals of the innovation are and whether the means of implementation have been identified. A lack of clarity, in the form of diffuse goals and unspecified means of implementation, can present major problems at the implementation stage; teachers and others may find that the change required is unclear in terms of how it translates into practice. Complexity refers to the difficulty and the degree of change required of the main players responsible for implementation. A determination should be made in regard to the difficulty, the skills, teaching strategies and materials required, and even the alterations in beliefs that the change will impose on the implementers. The quality and practicality of the innovation is also very important. Poor quality or the unavailability of needed materials and other resources can result when adoption decisions are made on the grounds of political necessity or perceived need without appropriate time for development.

Fullan (2001) contends that sometimes, especially in politically driven projects, when adoption is more important than implementation, decisions are made without the follow-up or preparation time needed to amass adequate materials. He concludes by asserting that to achieve large scale reform one cannot depend on people's capacity to bring about substantial change in the short run. Furthermore, ne needs to propel this process with high quality teaching and training materials.

Local factors

Fullan (2001) asserts that there are a number of local factors that need to be considered if implementation of an innovation is to be successful. These include: 1) the local education administrative institution such as a regional school district or the Regional Education Office in the case of Botswana, 2) the role played by principals, and 3) the role played by teachers. Firstly, the support of the regional administration is critical for change in practice in the educational system. Teachers will not take change seriously unless central administrators demonstrate through actions that they should. Regional administrators can demonstrate that the innovation should be taken seriously by actively supporting new proposals through visits to schools in their regions and by following through on decisions and commitments.

Secondly, the role played by principals or headmasters must be taken into account. The main agents of change in a school are the principals and teachers. Research has shown that the principals' actions serve to legitimate whether a change is to be taken seriously and to support teachers both psychologically and in terms of

resources (Berman, 1977; Berman, Pincus, Weiler, & Williams, 1979; Fullan 2001). Prophet and Rowell's (1993) study on whether teachers were using the official learner-centred pedagogy in Botswana has revealed that teachers, students, and school administrators (headmasters & their assistants) were perfectly happy to maintain traditional teacher-dominated classroom interactions. In this case, headmasters are supporting their teachers and students in resisting an innovation from a central authority (the Ministry of Education). In such a situation the innovation cannot be expected to take root as the schools appear to be subverting the innovation.

Thirdly the role played by teachers must be considered. Both individual teacher characteristics and collective factors play can influence implementation. The psychological state of a teacher can be more or less predisposed to considering and acting on curriculum innovations. Some teachers, depending on their personality, and influenced by their previous experiences and the stage of their career, are more self-actualized and have a greater sense of efficacy, which spurs them to take action and persist in the effort required to effect successful change (Huberman, 1988; Fullan, 2001).

On the other hand Prodromou (1995) has argued that many teachers trapped in an endless examination preparation cycle, as is the case in Botswana, see innovative teaching approaches including student-centred communicative methodologies as luxuries they cannot afford. Here, teachers, who are believed to have more knowledge of the exam and its required preparations, are expected to dominate classroom discourse. It is thus not surprising that the Prophet and Rowell (1993) study cited above found teachers, students and school administrators to be perfectly content with teacher-dominated classroom interactions, in spite of the fact that the pedagogy dismissed the student-centred one recommended by the Ministry of Education. Several other studies on classroom practice in Botswana have reported that classroom interaction continues to be teacher-centred in spite of the fact that the Ministry of Education has prescribed a student-centred pedagogy (Fuller & Snyder 1991; Prophet & Rowell 1990; Fuller 1991; Fuller et al. 1994; Tabulawa 1997; Tabulawa 1998; Yandila et al. 2003).

External Factors

The third category of factors to be considered during curriculum reform is external factors. In the case of Botswana, the Ministry of Education (MoE) is the main external factor. The relationship of schools to the MoE is straight forward. The system is bureaucratic and hierarchical. MoE officers contact schools through headmasters and teachers contact MoE officers through the headmaster. This system makes contact and communication between teachers and the officers responsible for curriculum development and assessment formal and cumbersome.

The BGCSE syllabus innovation, for example, was designed at the political level of the central government who then delegated the working out the details of the syllabus to task forces that drew up the new BGCSE syllabi. Teacher representation took the form of a few teachers from a few schools on these task forces with the bulk of the teachers being excluded from the exercise. There were also representatives from some University of Botswana (UB) Departments, in particular the English Department and the Communication and Study Skills Unit, who assisted with the English syllabus. The syllabi were then taken to teachers through regional workshops where teachers could comment on the new document and suggest changes. The whole exercise was rather top-down and the majority of teachers felt too intimidated to make any meaningful suggestions as the document came to them, for the most part, as a finished product (Nkosana, 2006).

THE IMPORTANCE OF LOCAL CONTEXT AND CULTURE

It has been argued that an innovation usually fails because the reformers do not treat the local context and culture as vital. They impose external ideas without taking into account the unique local environment and lean towards quick fixes (Micklethwait & Wooldridge, 1996; Senge, 1990; Fullan, 2001). Tabulawa (2003) argues that pedagogical approaches like student-centred teaching methodologies are usually prescribed by educational reform donor agencies, and are not just value neutral technical issues. These reforms indeed involve values, particularly values intended not just to improve the learning of students, but to inculcate in them certain values and worldviews it is hoped will ultimately permeate throughout the host society. Tabulawa (2003) contends that the fact that the activity of these agencies increased after the fall of the Soviet block, including the fall of the Berlin wall and the democratization of Eastern Europe and the Soviet Union itself, is significant. The trend, from then onwards was to assist those places, and other regions and countries of the world seen not to be democratic by the rich western nations, to democratize.

The democratization of these countries was considered to be particularly difficult if their education systems were not democratic and were using what were deemed to be undemocratic pedagogical approaches, including teacher-centred approaches. Because the transformations that have taken place in western countries and which are taking place in former Soviet Union and Eastern Europe may have not taken place in Asian and African countries, new/external methodologies are often seen as foreign and so rejected. In other words, it may be that student-

centred methodologies are incongruent with the social and political contexts of these countries. This is, perhaps, the reason that student-centred methodologies have not yet gained a foothold in Botswana despite their promotion by the National Commission on Education and the syllabi that were implemented in the early 1980s.

Fullan (1993) contends that in a situation where the education system is fundamentally conservative, like that of Botswana, change will never come from merely designing better reform strategies, but from changing the mind-set of the education system. This is because in a conservative education system, the way teachers are trained, the way schools are organized, the way the educational hierarchy operates, and the way that education is treated by political decision-makers results in a system that is more likely to preserve the status quo than to change. When change is attempted it results in defensiveness, superficiality or at best short-lived pockets of success. For change to come about then, a new mind-set needs to develop in the system's major players. This will, in turn, help the whole education system to develop a greater capacity for change so that change becomes part of the system's culture.

Fullan (1993) argues that a new mind-set among major players and greater change capacity develops in the education system when teachers develop a clear moral purpose for teaching. The moral purpose of education is to make a difference in the lives of students regardless of their background and to help produce citizens who can live and work productively in increasingly dynamic and complex societies. This purpose can only be realized if teachers are continuously innovative and changing as society changes. Teachers must seek out and embrace innovation because their work entails making improvements, and to make improvements in an ever changing world is to contend with and manage the forces of change on a continuous basis (Fullan, 1993). Teachers and other players in an education system, such as the education officers in Botswana, must consider themselves and be seen as experts in the dynamics of change. If they become skilled change agents and can also internalize the moral purpose of education, they will make a difference in the lives of students from all backgrounds, and by so doing help produce a society with a greater capacity to cope with change.

Block (1987) contends that teachers and education officers with moral educational purposes should have personal visions. He asserts that "creating a vision forces us to take a stand for a preferred future" (p102). He goes on to note that if one articulates a vision one is forced to voice doubts about the organization and the way it operates as well as doubts about oneself and one's actions. According to Block (1987, p. 123), "we all have strong values about doing work that has meaning, being of real service to our customers, treating other people well, and maintaining some integrity in the way we work." If teachers can create and pursue their personal visions and moral purposes for teaching they will become moral change agents in society.

Fullan (1993) has argued that teachers' resistance to change is not a straight forward factor but must be understood within the broader context of the school, the education system and the wider economic and socio-political system. MacDonald (1977) suggests that a number of barriers to successful implementation can be identified which relate to the extra demands that are made of people and institutions, the embodiment of new value positions which mobilize resistance, and problems of understanding underlying principles. Empirical studies have shown that planned curriculum change that requires teachers to substantially change their behavioral roles and perceptions of students is not likely to succeed (Klein, 1980; Fullan, 1993; Fullan 2001)). In other words, the success of a change can be a function of how congruent it is with teachers' current practices. It has also been argued that some teachers resist change because they are unconvinced of the benefits of the extra work required in the adoption of the innovation (Hurst 1981).

Doyle and Ponder (1977) have proposed what they call the practicality ethic to try to explain how teachers decide to adopt or reject an innovation. They assert that the practicality ethic is manifested in the common practice of teachers labeling certain change proposals as "practical" or "impractical". The labels are said to be non-technical expressions of the taken-for-granted world of the practitioner. They are expressions of teacher perceptions of the potential consequences of attempting to implement a change proposal in the classroom. Recommendations perceived as practical are ones which a given teacher will most likely incorporate. Those perceived as impractical have little chance of being tried unless control mechanisms, such as those which frequently accompany innovation projects, render teacher decisions unnecessary (Doyle & Ponder, 1977).

Doyle and Ponder (1977) go on to provide a useful theoretical framework called practicality for analyzing teacher decisions about accepting or rejecting a particular educational innovation. They see the practicality of a proposed change as a crucial element in the decision of teachers to adopt and implement a change. Their framework has three components: instrumentality, congruence, and costs. Instrumentality refers to how realistic the procedural guidelines are for the teacher. Congruence relates to how the proposed change fits with existing practices, classroom conditions and self-image of teachers and cost considers the positive returns in relation to the extra time and effort invested by teachers.

Practicality is perceived to be high when the innovation is deemed to satisfy all components of the framework and less when it meets only one or none of the components. In a study that assessed how curriculum reform was being implemented in Botswana, Nkosana (2006) studied teachers' response to the proposed

introduction of a speaking test in the BGCSE English examination. The results confirmed that teacher reaction to this innovation was guided by Doyle and Ponder's (1977) practicality framework.

In the study, teachers were asked whether they thought the recommended school-based continuous assessment of speaking skills was a feasible and practical proposition. The results revealed that 21/51 (41.2%) saw it as a feasible proposition, 11/51 (21.6%) didn't see it as a feasible proposition, and 19/51 (37.3%) were uncertain. Asked to provide reasons for their answers, those who thought that the innovation was not feasible noted the following: there are no resources for testing speaking (9/11, 81.8%); continuous assessment would not be a valid and reliable way of assessing students' speaking ability if done by unqualified examiners (5/11, 45.4%); and only written exams are fair (3/11, 27.2%). Those who were not sure gave the following reasons: the Ministry of Education never implements all its recommendations (7/19, 36.8%); speaking has never been tested before in Botswana (8/19, 42.1%); student numbers in each class and teacher workloads are already too high (3/19, 15.7%); speaking assessment would take up some of the time currently devoted to teaching (2/19, 10.5%); teachers do not know how to assess speaking (11/19, 57.8%); and the system is not ready for it (13/19, 68.4%). It seems clear from these reasons that those who were not sure if the testing was feasible, although they did not want to commit themselves, actually thought that it was not feasible. Consequently, the majority of the respondents, about 60% (58.9%), thought that testing speaking as recommended by the BGCSE English syllabus was not feasible.

Nkosana (2006) divided the reasons advanced by the teachers into four categories.

The First Category

The first category related to the unavailability of the resources needed for the successful assessment of speaking. The material resources mentioned by teachers, including audio-visual equipment such as tape players, video players and television monitors are not available in the schools in sufficient numbers to be used for the practice and assessment of speaking skills. These are required in the event the teacher or assessor is not sure what mark to give to a candidate's performance and needs to review it, especially in cases of paired or group testing where it may be difficult to adequately assess the performance of each candidate on the spot. Adequate recording equipment would make it easy to rate the performances of the candidates later or to review performances if the assessor or assessors doubt the fairness of their initial assessment.

In terms of human resources, many teachers reported that they were not qualified to assess and rate speaking. Some of the reasons they advanced included: teachers do not know how to assess speaking; the training they received did not equip them with the skills for assessing speaking; and teachers need proper training. It should be noted that the majority of ESL teachers who were then teaching in senior secondary schools in Botswana were trained to teach English for the COSC exam which did not test speaking, and so were not trained to assess speaking. This explains why some teachers claimed that they were not taught how to teach and assess speaking in their pre-service training**.**

In applying Doyle and Ponder's (1977) practicality framework to explain why/how teachers in Nkosana's (2006) study decide if something is feasible or not, most of the reasons advanced by the respondents for their uncertainty or unwillingness fit within the congruence part of the framework. Congruence relates to how the proposed change fits with the existing practices, classroom conditions and self-image of teachers. Most of the reasons provided thus have to do with how the proposed change related to respondents' existing practices, classroom conditions and self-image. The unavailability of material resources, for instance, such as audio-visual equipment in the schools implies that existing classroom conditions were not well suited to the assessment of speaking (one aspect of congruence). The reasons 'many teachers are not qualified to assess and rate speaking, and 'teachers do not know how to assess speaking' can be seen to invoke respondents' self-image. Thus when respondents assessed the conditions of the classrooms with regard to their suitability for the assessment of speaking and their own skills with regard to assessing speaking, they decide that the recommendation to assess speaking was not practical and therefore not feasible.

The Second Category

The second category of reasons advanced by teachers have to do with the difficulty of ensuring validity and reliability in an assessment involving numerous teachers with varying qualifications, experiences and backgrounds. In such a situation, for an acceptable level of validity and reliability to be achieved a considerable amount of teacher training in speaking assessment and in the rating of speaking performance would be needed. Moreover a system of moderation would need to be established to make sure the agreed upon procedures are followed and standards maintained. Establishing an efficient moderation system would be an expensive and daunting task for the Botswana Ministry of Education.

Here, two parts of the practicality framework, instrumentality, which relates to how realistic the procedural guidelines are to teachers, and congruence, seem to be useful in explaining respondent uncertainty or resistance. The reasoning that 'continuous assessment would not be a valid and reliable way of assessing speaking ability if done by unqualified examiners', has to do both with how realistic the procedural guidelines are (in this case for assessing speaking) to teachers and teachers' self-image. While it was not clear to the teachers how speaking was going to be assessed as no guidelines had been provided by the Ministry at the same time some teachers realized they were not qualified to assess speaking. The cost aspect of the framework is also applicable here in regards to reasons such as 'speaking assessment is too time-consuming'. When the teachers compared the effort and time they would have to invest in assessing speaking with the likely benefits, they decided that the recommendation to assess speaking was not practical or feasible. Given the above factors and reasoning, respondents in the study decided there were unsure about or opposed to the implementation of the Ministry's recommendation.

The Third Category

The third category concerns the difficult logistics of assessing speaking in view of the large numbers of students involved. Problems relating to the logistics of assessing speaking were also mentioned by education officers who were part of Nkosana's (2006) study. The BGCSE English classrooms are crowded as English is a compulsory subject. The problem of crowded classrooms is compounded by the fact that each teacher handles many classes and has a high teaching load of up to 40 periods per week or five day teaching timetable. The logistics of assessing speaking, even through coursework, in such a situation are daunting. Thus when teachers considered the crowded classrooms and high teaching loads they found these realities to be incongruent with the proposed changes and so they decide that the innovation was not practical or feasible.

The Fourth Category

The fourth category had to do with the view that the Ministry of Education never implements all its recommendations. Fullan (1993) asserts that in a system like that of Botswana, where education is highly centralized and under the control of political leadership, innovations can be introduced for political reasons rather than educational ones. In such a situation, a number of steps that should be taken to ensure successful implementation are not taken. Fullan (2001) contends, for instance, that a determination should be made in regard to difficulty, the skills, teaching strategies, materials and alterations of beliefs that the change will impose up its implementers. In the case of the BGCSE English syllabus, this pre-determination was not done as it seems that decisions were made based on nationalistic considerations without allowing adequate time for planning, preparation and development. The main concern of the Botswana government seemed to have been localizing the administration of senior secondary school examinations and certification as it did not want to continue to rely on a foreign organization (UCLES) for this (Botswana, 1991; Botswana, 1997). The decision was thus a top-down taken more for national political reasons than educational necessity. This is not to suggest that the educational pedagogy did not need reforming (there was need for reform as even under UCLES there was no assessment of speaking) but rather to indicate that because the decision was not made mainly for education reasons, certain implementation prerequisites were not fully considered before the decision was made. Some of the respondents confirmed this assessment in their opinion that 'the system is not ready for it'. The other important reason teachers indicated that the recommended assessment of speaking was not feasible was the relative lack of experience assessing speaking in the Botswana public school system compared to experience with the other three skills of listening, reading, and writing.

CONCLUSION

This paper has examined the main theoretical framework that has been used to understand curriculum reform. The traditional and common technicist framework was found to be inadequate because of its implication that teaching is a value-free, objective activity whose problems are solvable through the application of the scientific method. It has also been argued that the technicist input-output model of curriculum development, typical of the technicist approach to educational change, tends to ignore the wider social context that influences the locus of pedagogical change. Lastly, it has been argued that educational reform requires more than just implementing the latest central government policy. It requires changing the culture of classrooms, schools, educational administrative institutions, universities and the education system as a whole. The role played by school principals and teachers in education reform was found to be important in any education reform initiative. This study concludes that if educational innovation is to be successful, all major players, including class teachers and students, need to be brought onboard

in order to secure their full cooperation in the implementation of the innovation. The necessary human and material resources must also be provided.

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