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Curriculum as Context of Teaching and Learning

Introduction

This penultimate chapter considers the powerful influence the curriculum exerts on teachers' and students' classroom practices. More often than not, the curriculum is presented as an innocuous arrangement of subject-matter to be presented to the learners by the teachers and for the learner to assimilate in an unproblematic manner. However, the curriculum is both an enabling and a constraining structure. This position is reminiscent of Giddens's (1976) 'structuration postulate' which posits that 'the course of social history results from mutually constituting agent choices and structural dispositions' (Scholte 2000:91). As already stated, actors (such as teachers and students) do not act in a sociological vacuum. Their actions are simultaneously enabled and constrained by the context within which they operate. If structures (e.g. the curriculum) and acting agents (e.g. teachers and students) are mutually constitutive then it is necessary to:

situate the individual [teacher and/or student] in a social context [the curriculum], to be able to say something about that context in terms of its internal structure and dynamics, of the opportunities it makes available and the constraints it imposes, and at the same time grasp that essential individuality and uniqueness of man (sic) that evades any total categorization (Sharp and Green 1975:17).

Thus, the actions of individuals cannot be understood when abstracted from their context. Structuration theory is, therefore, useful in exploring the ability/inability of teachers and students to innovate. How then can the theory help us analyse the ways in which the curriculum constrains pedagogical innovations? Put differently, how does the curriculum, as structure, contribute to the regularity of teacher-centred teaching practices and their intractability in sub-Saharan Africa?

I attempt to answer this question by analysing curriculum development in the past two decades in Botswana, where the constructivist, learner-centred pedagogy has been declared the official pedagogy in schools. Ironically, emphasis on the pedagogy is intensifying at a time when the school curriculum is increasingly becoming behaviourist in orientation. Bearing in mind the fundamental differences between constructivism and behaviourism (see Chapter Three), this conflation of behaviourism and constructivism is contradictory: how are the two expected to co-exist? The tension between the two is further exacerbated by the recent emergence of the League Table – the ranking of schools by performance in terminal examinations. It is, therefore, important to look at these developments more closely with a view to establishing their implications for pedagogical reform.

To develop some useful insight into the Botswana curriculum, it is important to locate the curriculum in a global context. This is a context characterized by a discourse of economic competitiveness, a discourse that calls for reform of education and training to align them more closely with the labour and skills demands of the ‘new’ economy. While Botswana, just like most sub-Saharan African countries, has always had a national, prescriptive curriculum that heavily limits teachers’ and students’ room to act, the curriculum reforms of the 1990s further attenuated that space. Specifically, the emergence of the “Objectives-based Curriculum” has constrained the little autonomy the teacher had. The result was a further tightening of state control of teachers’ work. In other words, we have witnessed since the 1990s hyper-entrenchment of state surveillance of teachers in Botswana. This development was to be aided by the rise of accountability measures in the country occasioned by public sector reforms which were encapsulated in the discourse of productivity. Accountability in the education sector comes in the form of ranking of schools by performance in public school examinations results. School principals today are asked by their employer, the Ministry of Education and Skills Development (ME&SD), to account for the position of their schools in the League Table. The media have taken keen interest in the rankings and the general public gets the opportunity to discuss the examinations results on both public and private radio stations. In short, the performance of schools has become a public spectacle. This combination of surveillance and spectacle (Vinson and Ross 2003) has fundamentally altered teacher-student relationships by making them even more hierarchical and impersonal, leading to further entrenchment of banking education.

Contexts of Reform

The past two decades have witnessed an unprecedented global attempt to attune education to the demands of the 'new' economy. This has impacted on education in major ways, including leading to fundamental curricular reforms. One strand of this reform agenda is the production of a new kind of learner, worker or citizen. As noted in Chapter Two, the education system is expected to develop in learners attributes such as creativity, versatility, innovativeness, critical thinking, problem-solving skills, and a positive disposition towards teamwork – attributes deemed essential in today's changed work environment. Promotion of these attributes is not new in education, though. The Progressive Education Movement of the 1960s and 1970s purported to promote these qualities in learners. As Silcock (1996:200) states, 'Progressivists have always promised to deliver the independence of thought and action which life in modern societies demands'. However, Progressive Education retreated in the 1980s in the face of attacks from 'new right organisations and governments for supposedly reinforcing and failing to overcome the "underachievement" of many children in schools resulting in falling standards' (Usher and Edwards 1994:197). Interest in the attributes stated above was rekindled in the 1990s, this time reoriented to meet the demands of the 'flexible economy' (Rassool 1993). Their desirability is now couched in the discourse of international economic competitiveness. It is alleged that new patterns of economic production and organisation, leading to a changed workplace, have emerged and require a new kind of worker – what we identified in Chapter Two as Castells' (1997) 'self-programmable' worker. The call in the new patterns of production is for a multi-skilled, adaptable, and flexible workforce. Education has a major role to play in the production of this 'new' kind of worker. It is precisely (though not solely) for this reason that education is being reformed in many countries across the globe. Since the driving force is the urge to have a competitive edge in the global market, the move is towards what King and McGrath (2002:78) term 'a curriculum for competitiveness'.

Botswana was not to be left behind in this education reform stampede. In 1994, it unveiled the Revised National Policy on Education (RNPE) which, in many ways, was a response to the economic production and industrial restructuring taking place globally.

The Global Context of the RNPE

The evolution of the RNPE was in a context of global restructuring of education spurred by globalisation. Globalisation has been defined as:

...the intensification of worldwide social relations that link distant localities in such a way that local happenings are shaped by events occurring many miles away, and vice-versa. This is a dialectical process because such local happenings may move in an obverse direction from the very distanced relations that shape them. Local transformation is as much a part of globalization as lateral extension of social connections across time and space (Giddens 1990:64).

By emphasising the interplay of the global and local, Giddens' definition of globalisation eschews a deterministic relationship between the global and local in which the former is portrayed as determining processes in the latter. Although it is intensifying 'policy migration' (Edwards et al. 1999) or 'policy borrowing' (Tikly 2001), leading to a 'convergence in policy and practice throughout [the world]' (Priestley 2002:122), globalisation does not impose the globally circulating discourses on those countries' 'borrowing' policy. That is, the relationship between the global and local is a dialectical one (Christie 1997; Arnove and Torres 1999). Internationally circulating policy discourses, Hartley (2003:82) observes, are 'mediated by the cultural and political conditions which prevail [in any given context]'.

Thus, although it is important to draw upon global influences in trying to understand educational policy directions in Botswana or anywhere else, it is essential to recognise that the ultimate shape policy assumes is also a function of local circumstances and concerns. It is this mediation of the global by the local that gives globalisation its contradictory and paradoxical character, this in turn leading to gaps, contradictions and paradoxes in policies that emerge as a response to it. Formulation of the RNPE, as an education policy determined to produce a new learner, was not immune from these gaps, tensions, contradictions and paradoxes. These contradictions and paradoxes have implications for the success of pedagogical reforms.

The Local Context of the RNPE

The RNPE was published against the backdrop of harsh, global economic conditions that saw Botswana's revenues decline owing to a depressed world diamond market. This resulted in an upsurge in the unemployment rate, especially among the youth. For example, in the early 1990s youth unemployment stood at 41 percent of the 15-24 age group, compared to the total unemployment rate of 21 percent reported for the labour force as a whole in 1993/94 (Leith 2005). In the face of this reality, concerns were raised about the relevance of the education being provided. The government instituted the Kedikilwe Commission (named after its chairman) in 1992,

with a mandate to, among other things, 'identify problems and strategies for [the education system's] further development in the context of Botswana's changing and complex economy' (Republic of Botswana 1993:v). The Commission submitted its report, the *Report of the National Commission on Education* (RNCE), in 1993. The government's reaction to the Commission's recommendations came in April 1994 in the form of Government White Paper No. 2, the *Revised National Policy on Education* (RNPE). The text, together with other policy documents, reflects major discourses associated with globalisation, such as 'economic competitiveness, 'lifelong learning', and 'world of work'.

The thrust of this policy text was the alignment of education to labour requirements of the economy. This discourse of the economy-education nexus was emphasized in the RNPE and associated texts: 'The level and type of education that is offered is partly responsible for the speed with which industrialization can proceed' (Republic of Botswana 1993:8). The education system was to 'offer individuals a life-long opportunity to develop themselves and to make their country competitive internationally' (Republic of Botswana 1993:4). To prepare the workforce for higher productivity, education was urged to provide a 'high level of technical and scientific skills' (Republic of Botswana, 1993:8). To justify this policy direction, the Commission invoked the much-touted economic success of the Asian Tigers (Taiwan, Singapore, Hong Kong and South Korea), attributing their success to heavy investments in education and workforce training.

Given its concern for the economy-education dislocation, it is not surprising that the RNPE attributed growing youth unemployment in the country to the perceived dislocation. The Botswana Democratic Party (BDP) government insisted that the economy was in good shape. It was the education system that was failing to produce people with the requisite skills to take up available opportunities in the local labour market:

In the past decade rapid economic growth and the resulting changes in the structure of the economy have resulted in shortages of skilled personnel. However, the education system was not structured to respond to the demand (Republic of Botswana 1994:3).

This pronouncement needs to be treated with some skepticism. Given that Botswana was badly affected by the global economic crisis of the late 1980s and early 1990s, it smacks of disingenuousness to argue that the country's economy was in good shape. However, to pronounce otherwise would have been potentially suicidal on the part of the government, given that the 1994

general elections were just around the corner. It seems that the party ingeniously appropriated or 'bought into' the circulating global education discourse (of the economy-education dislocation) to deflect attention from the state of the economy as the source of youth unemployment. The perceived global economy-education dislocation offered a less controversial explanation for youth unemployment, an explanation that struck a chord with the electorate – the education system was not responsive to the new demands of a changing economy; it needed reforming.

What in fact were those 'new' demands and how was the economy changing? How was education to respond to these changes and new demands? The *Report of the National Commission on Education* (RNCE) of 1993 observes that:

Manufacturing techniques are changing and there is a general movement away from low skill, mass production assembly techniques towards higher degrees of automation and flexible specialization which require higher levels of skills (Republic of Botswana 1993:8).

Clearly a claim is being made here that Botswana's economy is to some extent post-Fordist and globalised, a claim that is more an aspiration than a reality. It has been suggested by some commentators (e.g. Kraak 1995; Chisholm 1997; King and McGrath 2002) that the adoption of post-Fordist work processes has been limited in South Africa (perhaps the only sub-Saharan economy integrated into the world economy). It would, therefore, be absurd to talk of flexible specialization in Botswana, with its pre-industrial economy. It, therefore, makes better sense to view the RNPE's emphasis on high skills as reflecting present and future economic aspirations, to somehow leapfrog the industrial stage. Furthermore, since the 1990s Botswana has aggressively pursued neo-liberal economic policies such as privatisation, cost recovery, deregulation and liberalisation. These are deemed essential if the country is to move away from the periphery and be better integrated into the global economy. Botswana is involved in the 'scramble' for foreign direct investment (FDI), and so it has to do everything necessary to position itself as an attractive destination for global capital. Among the demands of global capital are an open 'market' economy and a skilled workforce which displays attributes associated with a post-Fordist dispensation. Thus, the RNPE's emphasis on attributes associated with post-Fordism, in spite of the fact that Botswana's economy is not post-Fordist, should be understood in terms of the country's desire to be competitive, especially in attracting foreign investment. As Stewart (1996) observes, education in the era of globalization is pivotal in enhancing productivity and attracting foreign capital.

There are other ways policy texts reflect general post-Fordist thinking. Pedagogically, the RNPE explicitly espoused a learner-centred pedagogy based on social constructivism. As argued in Chapters Two and Three, social constructivism implies democratic social relations. In some sense, therefore, constructivism resonates with post-Fordism in that the flattened hierarchies that characterise post-Fordist production processes also require democratic work relations. In the context of the RNPE, it is believed that through activity-oriented teaching and learning methods such as ‘project-work, fieldwork, group discussions, pair-work, class presentations...’ (Republic of Botswana 1999:iii), learners would develop the capacity to think autonomously and work collaboratively with others. In fact, the homology between the RNPE’s preferred skills and those deemed essential in a post-Fordist setup is striking. Just like the latter, the RNPE identified the following attributes as central to a reformed education in Botswana: critical thinking skills, individual initiative, interpersonal skills and problem-solving ability. It is also telling that the Botswana Confederation of Commerce, Industry and Manpower (BOCCIM) recommended these attributes to the Kedikilwe Commission. Learner-centred pedagogy was identified as the ‘vehicle’ by which these workplace-related attributes would be inculcated in the learners. Given learner-centred pedagogy’s resonance with post-Fordist production processes, it is not surprising that the RNPE declared it the official pedagogy in schools.

A ‘New’ Role for Education?

In the light of these global and local economic developments, the RNPE envisaged a new role for education – the fashioning of a new kind of learner and, by extension, a new kind of worker and citizen. Changing classroom practices, therefore, was at the core of the RNPE initiative. And the RNCE had no illusions about the radical nature of the initiative since it would ‘require a transformation in the curriculum, school organization, teaching approaches, teacher training’ (Republic of Botswana 1993:40). Riddell (1996) also echoes the need for a radical reorientation of education when he argues that developing the capacities of the self-programmable learner/worker will demand more than just additional schooling and revision of the formal school. It will require a new form of schooling, one with a new ethos and new demands on the teacher.

Following publication of the RNPE, task forces for the various subjects were established to carry out syllabus reviews. The task forces were broad based, comprising academics, teachers, ministry officials in charge of curriculum

development and non-governmental organisations (NGOs). Guided by the Curriculum Blueprints for the three cycles of general education (primary, junior secondary and senior secondary) they were to develop 'skill-based syllabi' for all subjects. It was through these syllabi that Botswana's industrial and other human resource needs were, hopefully, to be met. Although there was vagueness regarding what qualified as a 'skill', essential employability skills – as identified by the Botswana Confederation of Commerce, Industry and Manpower (BOCCIM) – guided the review of syllabi. These generic/transferrable skills included critical thinking skills, individual initiative, interpersonal skills and problem-solving ability (Republic of Botswana 1993). Task forces were expected to subordinate knowledge/content to these skills. Content was not to be covered just for its own sake. It was to act as a medium through which the learner acquired these skills. Thus content that could not demonstrate potential to promote a particular set of skills related to the world of work was not to be included in the syllabus. The pitfalls of this approach are very clear: how were the task forces to determine what constituted a skill in any particular context? How were task forces to identify content that was vocational in nature? How were they to balance vocational elements (where they could be identified) with academic ones? These practical constraints were worsened by the lack of clear practical guidelines on how the task forces were to carry out the reviews.

The case of the task force for geography (a subject offered in the senior secondary cycle of the general education programme) can illustrate the syllabus review process. It has been indicated elsewhere that the development of the Botswana General Certificate of Secondary Education (BGCSE) geography syllabus was a deductive process based on the behaviourist objectives model of curriculum development (Tabulawa 2002). The task force was presented with the senior secondary Curriculum Blueprint, which stipulated the goals and aims of the senior secondary education programme. The task force then generated general aims of the subject (geography), aligning the aims with those of the senior secondary programme, as laid down in the Curriculum Blueprint. Then specific topics (content) were suggested. Every suggested topic was discussed, focusing mainly on identifying the vocational skills the topic would most likely promote. Once agreement had been reached on its appropriateness, then general objectives pertaining to the topic were generated. These defined in general terms what the student should be able to do after completing a topic. Specific objectives were then generated from the general objectives. These were specific skills that the learner should be able to demonstrate as a result of having undergone instruction, and were to

be stated in *assessable, observable and measurable behavioural terms* (Tabulawa 2002). Figure 8.1 illustrates the general arrangement of topics in the Botswana General Certificate of Secondary Education (BGCSE) geography syllabus.

Topic	General Objective	Specific Objective
Weather	Understand and appreciate the elements of weather	<ul style="list-style-type: none"> • Distinguish between weather and climate. • Demonstrate the ability to measure, record and analyse weather statistics of temperature, rainfall, humidity, air pressure, cloud cover, sunshine, wind speed and wind direction. • Describe factors influencing weather. • Analyse synoptic charts and interpret weather photographs. • Explain the atmospheric process that leads to difference in air pressure. • Identify global wind patterns. • Describe and explain the formation of relief, frontal and convection rainfall with reference to Botswana • Define the concepts of El Niño and La Niña. • Describe and explain the effects of El Niño and La Niña to human activity in Southern Africa.

Figure 8.1: Extract from the Botswana General Certificate of Secondary Education Geography Teaching Syllabus (Republic of Botswana 2000).

This syllabus displays four features reminiscent of the behavioural objectives movement: (a) knowledge is atomised; (b) skills are understood as narrow technical competencies; (c) content is tightly specified; and (d) outcomes are pre-specified/pre-determined as well as cast in measurable behavioural terms. Taken together, these features describe the technical/rational model of teaching discussed in Chapter One. Globally, we are witnessing a resurgence of technical rationality re-packaged as competency-based/outcome-based education which is supported by a rugged form of behaviourism. The latter is undoubtedly the philosophical underpinning of the current school curriculum in Botswana. This is problematic in a number of ways, one of which is the way it conflates constructivism with behaviourism. What are the pedagogical implications of this conflation?

One problematic conclusion emerges, namely that a learner-centred education was to be delivered through a behaviourist curriculum. As already stated, the RNPE settled for the constructivist learner-centred pedagogy as the official pedagogy in schools, and by extension, as the pedagogy that was to deliver the self-programmable learner. I argued in Chapter Three that both learner-centred and teacher-centred pedagogies are value-laden and embed epistemological assumptions that are diametrically opposed to each other. Constructivism and behaviourism are worldviews that engender in human subjects actions or practices that are not necessarily compatible. While the constructivist learner-centred pedagogy stresses process, dialogue, cooperative learning and the constructedness/situatedness of knowledge, behaviourism on the other hand stresses product and an atomised view of knowledge (Weber 2002). Clearly, behaviourism and constructivism are at odds with each other. But how is conflation of such apparently contradictory constructs possible? There may be many reasons. First among them is that policy makers in Botswana are often not adept at critically analysing concepts (such as learner-centredness and behaviourism), and isolating the values that inform each one of the concepts. If they were skilled in that, they probably would have realised that there is tension between the two concepts. Secondly, as argued in Chapter Two, it is seldom the case that learner-centredness is attractive to policy makers for its educational value. Learner-centredness has social, economic and political appeal. Ordinarily, this is more attractive to policy makers than any avowed educational value of the pedagogy. As a matter of fact, the RNPE and associated policy texts do not advance any robust arguments for the cognitive/educational efficacy of the pedagogy whereas social and political arguments for the pedagogy abound in the texts. Thus casting the value of learner-centredness in educational terms in the RNPE was more of a symbolic gesture than anything else. Its real import lay in its value as a legitimating device or justification for linking general education to the world of work. In such circumstances, one does not expect much attention to be paid to (epistemological) assumptions underpinning concepts such as constructivist learner-centredness and behaviourism. Conflating them, therefore, is hardly viewed as problematic. However, at a conceptual level, conflating them sends 'mixed messages' to teachers and can be expected only to lead to pedagogical confusion. The behaviourist curriculum currently obtaining in Botswana undercuts the preferred constructivist learner-centred pedagogy. While it would be disingenuous to suggest a deterministic relationship between behaviourism and didactic teaching, it should, nonetheless, be observed that prospects for such a relationship to develop are enhanced by a tightly framed

assessment regime such as the one Botswana has. To look at these issues in more detail, I return to the four features of the Botswana curriculum that are reminiscent of the behavioural objectives movement. These features turn the curriculum into a very potent tool of teacher control/surveillance. Surveillance combined with accountability imperatives attenuate teacher and student autonomy, thereby reducing teaching and learning to technical activities in which teachers' preoccupation is to dispense knowledge for the students to assimilate uncritically.

Surveillance Through Atomization and Tight Specification of Content

Use of behavioural objectives in curriculum design has been criticised for fragmenting 'learning into narrowly conceived categories of behaviour' (Tennant 1988:117) and for leading to an atomised, 'tightly constrained curriculum with closely, specified content' (Naish 1996:73). The holistic and contextual nature of knowledge is lost. A closer look at Figure 8.1 shows that an attempt is made to break topic content into small, discrete units. This decontextualisation of knowledge is accentuated by the fact that the teacher receives the curriculum sealed with the Teacher's Guide to assist them to implement it. The highly specified content (as illustrated in Figure 8.1) leaves absolutely no room for the teacher to determine what to teach. The teacher's role is reduced to that of a technician who dispenses pre-packaged chunks of knowledge without any ethical consideration of what they are doing. In short, the curriculum is teacher-proof. What gets lost as a result is the social nature of learning and skill acquisition, the very attributes learner-centredness is meant to promote. This situation, in Purpel and Shapiro's (1995:109) words, 'robs [teachers] of the opportunity to think creatively about how they teach or what it is that should be taught...'

However, as Knight et al. (1998) observe, to promote and develop creativity, independence, innovativeness and critical thinking, some degree of student and teacher autonomy is a prerequisite. The autonomy is further constricted by an assessment system that is strictly related to the highly specified behavioural objectives. In effect, in the examinations students may not be assessed on an objective that is not reflected in the syllabus. The tendency, therefore, is for teachers to focus almost exclusively on those objectives reflected in the syllabus. Because the syllabus content is atomized, and teachers focus exclusively on those 'atoms', students do not acquire a holistic appreciation of a topic; only content pertaining to those specific objectives of the topic is covered. What of that content which is not covered by the objectives but which is essential for a

holistic appreciation of the topic? That tends to be lost. As a result, it is highly probable that students only gain disjointed, partial and fragmented chunks of knowledge that, even when put together, do not cohere into a topic.

In previous curriculum arrangements, syllabi simply listed the topics to be covered without breaking them down into their constituent elements, that is, without specifying objectives. Because the teacher did not know what aspect of the topic would possibly be set for the examination, the tendency was to be as comprehensive in the coverage of the topic as possible. The benefit to the student was more holistic coverage and probably also better understanding of a topic. In other words, even though the content in the previous syllabus was also prescribed, there was still room for the teacher to cover it as extensively as he/she wanted. That room is considerably reduced in the current behaviourist/rationalist curriculum. Thus, the highly prescriptive curriculum that emanated from the RNPE represented a further tightening of the framing and classification of the curriculum, leading in turn to intensified teacher surveillance and control (Bates 1999).

Pre-specified Outcomes and Classroom Practices

Hyland (1994:54) observes that: 'If behavioural objectives... are constructed in highly specific terms or are pursued to the exclusion of all else, they can easily become educationally counter-productive and vulnerable to all the weaknesses of behaviourism...' For example, emphasis on measurable behavioural objectives ensures effective marginalisation of the more humanistic concerns of education in favour of the instrumental. Figure 8.1 above displays this quality; it is clear that it is only the cognitive aspect that is accommodated. 'Fuzzy' achievements such as teamwork, independence and autonomy, creativity, critical thinking and innovativeness which are part of the affective, are effectively excluded. Performance outcomes are therefore valued over process, leading to a 'monocultural view based on the satisfaction of narrow performance criteria [directed] towards fixed and predetermined ends' (Hyland 1994:54). The result may be a 'limited model of teacher-student interaction' (Bull 1985:79). In short, the behaviourist approach to curriculum development embeds a model of teaching and learning that is mechanistic and reductionist. Thus the model undercuts the constructivist learner-centred pedagogy that is meant to deliver the self-programmable worker of the future. While the rhetoric of the RNPE is generally post-Fordist, the curriculum development approach is top-down, hierarchical and therefore inherently concerned with regulation, surveillance and control, all these being qualities of Fordist production processes.

Although teachers are encouraged to go beyond the syllabus objectives, there is no incentive to do so, given the spectre of too many objectives to cover in a year. In conversation, teachers confessed that the emphasis on measurable performance outcomes encourages them to 'teach to the objective'. Treated in this manner, knowledge assumes an objective existence, far removed from student experience. This has implications for classroom pedagogical practices: teachers 'spoon-feed' students with the information they need to pass examinations. 'Delivery' of information to meek and passive students becomes the teacher's preoccupation. The social nature of learning is lost, as Gewirtz (1997:230) observes:

[There is] a decline in the sociability of teaching [and] pressure on teachers to adopt more traditional pedagogies, with a focus on output rather than process and on particular groups of higher-attaining students.

In this scenario, prospects for the development of generic skills such as interpersonal, communication and teamwork skills are considerably diminished.

While the case has been made above for the deleterious effects (on the possible production of the self-programmable learner) of features (such as atomisation of knowledge and skills, pre-specification of content and the focus on performance outcomes) characterising the RNPE, it is important to point out that the features do not in themselves compel certain classroom practices. Their effect on classroom practices is contextual. For this reason it is necessary to explain why these features play out in the Botswana context in ways that are similar to or different from the way they play out in other education systems. A comparative perspective would be helpful here. For example, the use of behaviourist objectives in both New Zealand's Competence Based Education and Training (CBET) approach to unit standard and the United Kingdom's (UK) General National Vocational Qualifications (GNVQs) had different and contrasting effects on teaching and learning. In the case of New Zealand's unit standards, the use of behaviourist objectives led to didactic teaching, while in the case of the GNVQs (even though competence-based just like the unit standards in New Zealand) evaluations of the programme (see Bates 1999, and Knight et al. 1998 for example) confirmed a relatively easy co-existence of learner-centred pedagogy and a competence-based assessment.

The reason for the deterministic relationship between behaviourist objectives and didactic teaching in the case of unit standards had to do with the fact that standards were tied to content, leading to tightly framed assessments. The GNVQs, on the contrary, explicitly tried to separate

pedagogy from curriculum and assessment leaving room for a high degree of procedural autonomy. The case of Botswana is akin to that of the unit standards in New Zealand. As already observed, curriculum in Botswana is centrally orchestrated and is prescriptive to the point of being teacher-proof. When this aspect of the Botswana curriculum is dovetailed to a tightly framed assessment regime in which tests and examinations precisely reflect the myriad of specific objectives, it is not difficult to see how behaviourist outcomes are likely to contrast with learner-centred pedagogy. Thus, whether or not the use of the behaviourist model compels certain classroom practices will depend on how tightly or loosely outcomes are tied to content, this in turn leading to tightly or loosely framed assessments.

The Rise of Accountability

If the objectives-based curriculum and the attendant tightly-framed assessment regime have constricted teachers' autonomy, that is, if the two have augmented the surveillance of the teachers' work, then the emergence of the League Table ranking of schools by performance in public schools examinations results has turned school performance into a public spectacle, the latter defined as the watching of the few (teachers, students, classrooms, schools, etc.) by the many (the entire news-interested public) (Vinson and Ross 2003). Teachers' work-as-spectacle has not directly emanated from the RNPE. Instead, it emanates from the state-inspired public sector reforms that started in the late 1990s. This background is necessary if we are to appreciate the effect of the accountability movement on the education sector.

The global economic crisis of the 1980s affected Botswana badly. Due to a slump in the demand for diamonds in the major markets such as Japan and the United States of America, Botswana, as an economy dependent on diamonds, experienced an unprecedented decline in foreign revenue earnings, and was forced to stockpile diamond production. This adversely impacted the government's ability to deliver on development. For example, in National Development Plan (NDP) 8 (1997/1998-2002/2003) the government forecast gloomy economic prospects and called for austerity measures across the entire public sector. As a result, issues of economy, efficiency and effectiveness came to the fore. This then called for improved *productivity*, defined as 'getting more output from more or less given resources' (Tomlinson 1994:170), on the part of the civil service. This led to a flurry of initiatives, most of which were imported from Malaysia and Singapore, aimed at boosting productivity, such as Work Improvement Teams (WITS), Performance Management System

(PMS) and its derivative, Performance-Based Reward System (PBRS) and Balanced Score Card. All these initiatives aimed at improving the productivity of workers. PBRS, for example, demanded that institutions and employees set themselves targets (couched in behaviourist terms) which they had to achieve within specified periods of time. There were to be rewards and sanctions for good performance and poor performance respectively.

Teaching as a public enterprise was not spared these accountability measures. No sooner had the government started rolling out its productivity drive than were schools expected to draw up plans indicating how they would improve terminal examinations results, in particular the Primary School Leaving Examinations (PLSE), Junior Secondary Certificate Examinations and the Botswana General Certificate of Secondary Education Examinations (BGCSEE). The results of these examinations became the sole indicators of a school's effectiveness. The emergence of the League Table means that the school's position on the Table matters more than anything else. The deleterious effects of league tables in other contexts have been noted (e.g. Jansen 2005; Gorard et al. 2002; Winter 2000; Goldstein 2003). Publication of examination results 'names and shames' those schools regarded as under-performing. In Botswana principals of 'under-performing' schools are written personal letters requesting them to account for their school's under-performance and state why they believe they should not be retired as a result. The effects of all this are not difficult to discern; some include (a) attempts by schools to 'game the system' (Leyva 2009:372) by employing strategies (some legal and some not) to improve examinations scores (e.g. poaching 'good' students from other schools); and (b) increased levels of stress on principals, teachers and students. This occurs as education officers put pressure on principals, who put pressure on teachers, who in turn pressurize students. Hierarchical relations become a defining feature of the system. However, as discussed in the preceding chapter, hierarchical relations reinforce central control which in turn standardizes and routinises official practice, including pedagogical practice.

Other counter-productive effects of accountability are:

(a) The tendency by teachers to 'teach to the specific objective'. This is least surprising given the close link between specific objectives as they appear in syllabi and assessment. With the ends justifying the means, teachers adopt didactic and authoritarian teaching and learning practices (see, for example, Prophet 1995 and Tabulawa 1997), the very practices that are antithetical to the production of a self-programmable, self-regulating learner. Thus, although at the level of policy rhetoric the RNPE promises a radical transformation

of classroom pedagogical practices, in reality it may just serve to perpetuate extant didactic pedagogical practices associated with banking education;

(b) Increased competition among students. Learner-centred pedagogy stands for cooperative learning. Such learning, however, is seriously attenuated when out-performing others is more important than working together with them to achieve a common goal. A student at Botswana General Certificate Examinations level (the qualifying examinations for tertiary education) needs necessarily to out-perform others in order (i) to get admission into the most highly-prized programmes at tertiary institutions and (ii) to qualify for government sponsorship to study at the tertiary education level. In such situations, self-interest takes precedence over collective interest. Thus ironically, emphasis on accountability promotes rugged individualism;

(c) Increased competition between schools. It is difficult to imagine neighbouring schools engaging in genuine and authentic cooperation with one another in the interests of the students when each wants to lead the league table. It would seem that school-school cooperation is gradually being replaced by school-school competition.

Conclusion

In summary, it would seem that both the curriculum and the rise of accountability may be averse to a constructivist, learner-centred pedagogy. The behaviourist, skills-based curriculum that resulted from the attempt to attune education to the world of work and the strongly framed assessment regime have attenuated further whatever little existed of teacher autonomy and is encouraging both teachers and students to adopt pedagogical practices aligned to banking education. The objectives-based curriculum development model has attracted criticism, one of which is that it embeds a model of teaching and learning that is mechanistic, reductionist, technical and transmissive (Apple with Junk 1993) and that it neglects the 'examination of inaccessible and unobservable mental events' (Tennant 1988:107) such as critical thinking, creativity, independence of thought, innovativeness and flexibility, the very attributes of the self-programmable learner. 'Teaching to the objective' is rapidly becoming the norm. This is being exacerbated by the rise of accountability measures such as the performance-based reward system (reminiscent of the nineteenth century 'pay-by-results' system) and the publication of league tables of examination results. It would appear, therefore, that the evolving curriculum ambience in Botswana has the potential to act as a powerful obstacle to pedagogical innovation.