

# Changing curriculum policy into practice: the case of physical education in Hong Kong

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## ABSTRACT

This article examines the differences between the formally stated aims of education and the implementation of the school curriculum in order to show the divergence between what is initiated and what emerges as school practice. This implementation problem is examined from the policy-makers' and teachers' perspectives, with specific reference to physical education as a school subject in Hong Kong. First, it examines the existence and intention of educational policy towards curriculum as established by policy-makers. Second, the implementation process is evaluated from the teachers' perspective by employing a framework adopted by Cuban (1998) that utilized effectiveness, popularity, fidelity, adaptability and longevity. The data are derived from a case-study of a physical education programme that included document analysis, and interviews with teachers, parents and students. The case-study provided a subjective perspective of teachers and their work, while the framework assisted in demonstrating the absence of cohesion between the various government agencies. The resulting fragmentation of ideas leading to confusion and frustration for teachers also indicates that longevity and adaptability are likely to be the most constructive criteria for the assessment of curriculum change.

## KEY WORDS:

physical education curriculum; curriculum policy; school practice.

This article examines the school physical education curriculum in Hong Kong, in order to understand some of the issues that are associated with the

implementation process of education reform. Much has been written about the problems of implementing the intended curriculum in the classroom (Fullan, 1998) and why policies are not implemented as planned. Emerging from this analysis are clear signs that the breakdown in the process comes at the point when teachers are given the task of transforming the technocratic planners' rhetoric into reality. Moreover, the preoccupation of policy-makers is not with the substantive issues of curriculum but with how 'to figure out the best ways to get teachers and schools to change' (Sergiovanni, 2000: 58). Therefore, the primary purpose of this article was to investigate the degree to which Hong Kong education policy was successfully implemented into school practice. This was accomplished by examining the apparent differences that exist between what policy-makers intend to happen and the subjective experiences of physical education teachers in their everyday school practices. The criteria 'fidelity, effectiveness, popularity, longevity and adaptability' proposed by Cuban (1998) were employed as a theoretical framework by which the effectiveness of school reform policy could be assessed.

### SCHOOL PHYSICAL EDUCATION – INTERNAL CONFLICT, EXTERNAL THREATS

Educational policy has consistently encouraged schools to consider physical education as a core subject because, for one reason, it is recognized as the subject that is highly relevant in addressing the health-related issues associated with modern urban life (Sallis and McKenzie, 1991). However, physical educators are generally very pessimistic about the present marginality of their status (Johns and Dimmock, 1999) and even the future of their subject (Locke, 1998). They see themselves as structurally disadvantaged, suffering from overcommitment and burdened with administrative tasks coupled with low expectations for success (Evans and Williams, 1989).

As these conflicts persist within the profession, physical education teachers are also faced with external challenges as government policy elites propose curriculum change as a part of school reform. Teachers in Hong Kong, as in other countries, feel increasingly bewildered and overburdened by the frequent reform proposals that emanate from the changing policies of government. Moreover, the relative weightings given to physical education, in terms of curriculum time, reveal a serious slippage between the intention of educational policy and what is actually practised (Johns and Dimmock, 1999).

Unfortunately, education policy and practice research in physical education have not matched the global interest in educational change, as represented, for example, in such work as the collection of papers edited by Hargreaves, Leiberman, Fullan and Hopkins (1998). A few notable exceptions include the

debate over the implementation of the National Curriculum in physical education in England and Wales. The 1992 British National Curriculum Physical Education (NCPE) has been the centre of interest in several critiques that have examined the problems between policy and implementation (Curtner-Smith, 1999; Evans and Penny, 1995; Harris, 1993). Evans and Penney (1992) examined the NCPE and found that 'What was actually practised by teachers and experienced by pupils was rather different from the official aims and policy of NCPE' (Curtner-Smith, 1999: 76). This is consistent with the Rand Change Agent Study in the US which found that it was 'exceedingly difficult for policy to change practice [and] that nature, amount and pace of change at the local level was a product of local factors that were largely beyond the control of higher-level policy-makers' (McLaughlin, 1998: 71).

The examination of curricular innovation at a local level has revealed that it is at the point where rhetoric confronts reality that difficulties arise (Morris, Chan and Lo, 1998). Even when university departments of professional preparation join schools to support changes in curriculum, the collaboration is only effective if traditional rules, roles and relationships, as well as values, are altered (O'Sullivan, Tannehill, Knop, Pope and Henniger, 1999: 238). Earlier, Sparkes (1991: 2) observed that real change would probably take place only when 'the transformation of beliefs, values, and ideologies held by teachers that inform their pedagogical assumptions and practices' had been completed. However, Curtner-Smith (1999) found that some teachers are intransigent and employ a 'strategic rhetoric' (Sparkes, 1987) to project an impression that change has occurred. In fact, teachers often favour adaptation to adoption of the technical curriculum in order to facilitate its co-existence with present ideologies and perspectives.

It is clear from these studies that the focus must be on teachers in order to conduct an effective examination of the problems of implementation. This is not to suggest that teachers are the stumbling blocks that prevent sound ideas from being implemented. Rather, it suggests that teachers, when they wish to be, are more instrumental in shaping than preventing the successful implementation of the curriculum. In addition, they represent the last important link between statements of intention and classroom reality, filtering intentions by educational planners and shaping them into the realities of the class setting.

## RESEARCH METHOD AND THEORETICAL FRAMEWORK

### *Data collection and analysis*

Previous research (Johns and Dimmock, 1999) has provided the basis for assuming that educational reform in Hong Kong has not been enthusiastically

adopted. Nevertheless, understanding the problems of implementation of education policy from the teacher's perspective is still unclear. In order to clarify the issues, this research utilizes two sources of data to support the analysis. First, from the policy-makers' perspective, a review of the published reports, curriculum materials and other related documents was conducted. Interviews were arranged with representatives from the Educational Department and the Curriculum Development Council, two of the government agencies responsible for providing direction for the implementation of education policy. Second, from the subjective experiences of the physical education teachers, a case-study approach was used to examine the physical education programme in one Hong Kong secondary school. The school provided a valid cultural context in which local choices about how and whether policy should be put into practice could be examined. The data were collected by means of school visits and direct observation of school organization, examination of facilities, timetables, promotional materials and school records. Interviews were conducted with twenty-five members of the school, including six parents, three administrators, ten teachers and six students. With the exception of one follow-up interview for further clarification with three different teachers, a single interview was conducted with all the other respondents. Each interview lasted from thirty minutes with students up to eighty minutes with some staff. Evidence was also gathered from informal group discussions with teachers attending my post-graduate in-service classes at the university. In addition, interviews with physical education teachers from other schools also supported the data collected in this study.

All tapes were transcribed verbatim, speakers identified and the raw data organized to highlight relevant responses to the questions posed in the interviews (Cote, Salmela, Trudel, Aberrahim, and Russell, 1993). An open coding system was used to identify meaningful pieces of information that formed comprehensible text segments (Tesch, 1990). The segments with similar meaning were collected together and tagged so that speakers and their responses could be identified according to topics such as 'opinions on school policy' and 'parental views on school sport' (Miles and Huberman, 1984).

### *Theoretical framework*

The problems of curriculum implementation that have been identified throughout North American, European and other westernized cultures are remarkably similar because a relatively few researchers are studying the problems of a small number of countries located in these regions (Nieto, 1998: 419). Therefore, the tracking of models used to evaluate education change is relatively easy because there are few and those that have been employed have received similar reactions from observers.

Early assessments of the effectiveness of education reform depended on a

'fidelity standard' that evaluated the success of the initial design, the formal policy and the eventual implementation (Cuban, 1998). The approach assumed the full compliance of the teachers, who would faithfully reproduce the intentions of the curriculum developers. Gradually, curriculum implementation was viewed less as simply a mirror of a designer's blueprint and more as an interactive and negotiated process between curriculum developers and teachers. The role of the principals went from enforcing teachers' compliance to providing support to what was called the mutual adaptation approach, while teachers adapted new curricular policy to suit the needs of the school and its students. As the range of implementation problems surfaced, 'the enactment approach' (Snyder, Bolin and Zumwalt, 1992), which placed greater value on the educational experiences of the teachers and students, was added as an alternative criterion. Over the years, attempts to evaluate success spawned a range of standards as planners and teachers worked together to adapt and modify the educational plans in the determination of student outcomes (Fullan, 1982: 31).

These variations in the way curriculum was introduced to schools reflected a gradual change in organizations. Top-down structures generating centralized policies gave way through decentralization to less rational decision-making, less control and more flexibility in how the reforms were interpreted. Consequently, when teachers change the plans by adding, taking away and adapting features, fidelity as a simple test of effectiveness is no longer a valid standard of assessment.

Cuban (1998) has suggested that popularity and longevity could be considered as alternative criteria to measure the success of government initiatives. Regardless of their success, school reforms that are initiated by the government are often announced in such a way that they highlight desirable and idealistic goals but fall short of the ways and means to implement them. By appealing to the taxpayer through reforms that attempt the impossible, government policies are aimed at striking a chord with parents, the school administration and the teachers. Such government attempts to identify ways of solving education problems may initially impress the public but, by the frequency of their appearance and the rapidity with which their popularity fades, provide no measure of longevity. Even though such a criterion has been considered a useful indicator of effectiveness, it is of little value when programmes become unpopular before they are implemented. Many experienced teachers are cynical of the fanfare with which innovations are announced because their experience informs them that most, if not all, reforms have no durability. Therefore, a criteria that measures longevity and popularity may be plausible (Cuban, 1998).

Educational reform is evolutionary in the way it is conceived, promoted, implemented and evaluated, as witnessed in the gradual erosion of the top-down rational approach that demanded teachers' allegiance and fidelity in the

way the policy was implemented and followed. Nevertheless, teachers continue to play a vital role in the success of educational reform because they are located at the point where policy is transformed into practice. Their transitional role is not passive but is one in which they wish 'to put their personal signature on the mandated reform and make it work for their students and themselves' (Cuban, 1998: 5). Teachers are more receptive to change when they can make plans work by custom fitting them according to local will and capacity (McLaughlin, 1998) than they are when they are expected to faithfully follow the planner's ideas through to classroom practice. The criterion of adaptation may be a useful method of evaluating the degree of success of curriculum reform.

The trend towards decentralization and school-based management in schools around the world is clearly seen in the changes that have taken place in Hong Kong in the last decade. As the government adopted a policy of devolution whereby schools would assume more responsibility for their management, teachers and principals became more actively involved in decision-making (Morris, 1995). It has been observed that 'schools change reforms as much as reforms change schools' (Cuban, 1998: 1). Therefore, conventional ways of assessing the effectiveness of school reform are no longer valid, because they fail to consider reform as an interdependent process. To illustrate that reform involves the response of both planner and teacher, the criteria of fidelity, effectiveness, popularity, longevity and adaptability will be used to assess the degree to which school reform in Hong Kong has been successful.

## EDUCATIONAL POLICY AND SCHOOL PRACTICE

In this study I examine the differences between what is formally stated about the aims of education and the implementation of the school curriculum, in order to show the divergence between what is initiated and what emerges as school practice. In Hong Kong major education advisory and executive bodies, including the Education Department (ED), the Curriculum Development Council (CDC) and the Curriculum Development Institute (CDI), are given the responsibility of setting policy. One of the ways of fulfilling this responsibility has been to produce documents that proclaim the general aims of education. While there is a plentiful supply of materials expressing the policy of the government, a dearth of documents pertaining to physical education makes it difficult to analyse how policy is implemented. Nevertheless, from the few policy documents that exist it is possible to draw conclusions that expose the gap between policy and practice. The first part of the analysis clarifies the policy and its intentions with respect to school delivery.

*Educational policy*

The education system in Hong Kong serves a homogeneous population located in a Special Administrative Region that is relatively small in area and administered by a central public policy. Paradoxically, policy relating to curriculum design and implementation by the ED is less forthright. Educational policy, curriculum plans and subject syllabi are three distinct levels of planning that are carried out by several agencies appointed by the government that appear to have similar mandates. Policy is broadly used to mean the general aims of education, regularly cited in the introduction to the various reports released by the Education Commission (EC). The statement that has appeared in several annual reports dating back to 1993 is as follows:

School education should develop the potential of every child, so that our students become independent-minded and socially-aware adults, equipped with the knowledge, skills and attitudes which help them to lead a full life as individuals and play a positive role in the life of the community. (Education Commission, 1999)

In 1999 the EC referred to these aims in their effort to meet the unique requirements and future development of Hong Kong. They observed that 'A Statement of Aims issued by the Government in September 1993 covers only school education but not each and every stage of learning' (Education Commission, 1999: 3). In a revised statement on the overall aims of education for Hong Kong in the twenty-first century, the new aims read as follows:

To enable everyone to develop to their full and individual potential in all areas covering ethics, intellect, physique, social skills and aesthetics, so that each individual is ready for continuous self-learning, thinking, exploring, innovating and adapting to changes throughout life; filled with self-confidence and team spirit; and is willing to strive incessantly for the prosperity, progress, freedom and democracy of the society, and to contribute to the future well-being of the nation and the world at large. (Education Commission, 1999: 15)

The aims of education expressed in these two policy statements are examples of the documents that emanate from the EC. Unfortunately, they lack supportive materials such as objectives, guidelines or learning experiences that would assist teachers to implement curriculum changes that reflect the stated policy. Furthermore, there is no method of ensuring that all teachers receive a copy of the policy and no apparent co-ordination between government agencies to ensure that the policy becomes a common mission or that they work together towards its realization. For example, the current secondary school syllabus for physical education was published by the CDC in 1988 (Curriculum Development Committee, 1988). The document

contained no statement of aims or objectives and provided no supporting materials, until the CDI produced a booklet in 1994 (Curriculum Development Institute, 1994). This booklet was substantially larger and provided detailed suggestions of what the physical education teachers could teach, but it provided no statement of aims that would reflect the general policy of the government.

A syllabus for primary schools was published in 1995 and contains a preface, objectives and a brief section on planning the curriculum (Curriculum Development Council, 1995). However, the objectives are worded in such a way that it is difficult to imagine that they relate to the EC's aims of education as stated above. For example, two of the objectives for the primary school state: 'To improve the organic system the neuro-muscular system and the physical fitness of pupils' and 'To cultivate pupils' powers of observation, analysis, judgement and creativity in the process of participation in activities' (Curriculum Development Council, 1995). Perhaps it is more than a coincidence that the Chief Executive Officer for Hong Kong called for a thorough review of the education system in his 1997 policy speech. As a result, the Education Commission has received new impetus to launch once again a comprehensive review of education.

Schooling in Hong Kong has been developed and shaped, regardless of the perpetual review process, by a system of agencies that have been centrally controlled and circumscribed by the government for several decades (Johns and Dimmock, 1999). By the early 1990s, Hong Kong reflected similar concerns to those expressed by many other countries throughout the world regarding school reform and educational change (Hargreaves, Lieberman, Fullan and Hopkins, 1998). Specifically, concerns were raised regarding the efficacy of centralized administration of schooling. Following the trends of other countries, the Hong Kong government adopted a policy of decentralization and devolution (Walker and Dimmock, 1998; Dimmock and Walker, 1998) in an attempt to promote greater autonomy by shifting responsibility and discretion to schools, teachers and parents.

In this shift a number of government agencies, formed to advise schools and set policies concerning syllabi, curriculum materials and examinations, were also forced to consider restructuring. Consequently, these agencies are constantly in a state of change. For example, the Curriculum Development Council (CDC) has recently been restructured to assume the role of 'the main advisory body on setting general directions of curriculum policies in school education' (Curriculum Development Council, 2000). Another agency, the Curriculum Development Institute (CDI), consists of a small group of curriculum specialists who are directed by the CDC to draw up a syllabus and write guidelines and supportive materials. In the past this has been accomplished by recruiting interested and qualified teachers to assist in the preparation of materials. The syllabus is an advisory document that merely



lists the activities that are 'designed for schools with standard facilities, time allocation and qualified teachers' (Curriculum Development Committee, 1988: 5).

Another example of their work is the previously mentioned booklet produced in 1994 which suggested the content that should be covered in secondary school physical education classes. The document containing the supporting materials consists of practical and theoretical units that suggest what is to be taught in more detail. Each unit comprises a history of the specific activity (such as basketball), rules, equipment required, terminology, analysis of skills and strategies of the game. The delivery of the curriculum was confined to a two-page description that suggested operational and general guidelines such as 'the CDI suggests that two periods per week should be devoted to practical units'. The booklet is recommended for teachers conducting classes for students who have elected to sit the physical education Hong Kong Certification of Education Examination (HKCEE) set by the Hong Kong Examination Authority (HKEA). For these students, two additional periods are recommended to teach a theoretical component. The booklet also lists the basic facilities required to conduct the suggested curriculum in government, aided and some private secondary schools. This rudimentary list consists of, for example, an open basketball court, a covered playground and a school hall (Curriculum Development Institute, 1994: 418). No other guidelines are provided for the implementation of the suggested curriculum.

In addition to the booklet set out by the CDI, the HKEA provides a set of guidelines to assist teachers in preparing students to sit the HKCE examination. However, only 9 per cent of Hong Kong schools offer the examinable physical education course 'in spite of the fact that the course was proposed in 1991' (Chan and Johns, 1998: 177). From the plethora of agencies overseeing and suggesting what should be taught in schools, it is understandable why decisions about curriculum were perceived to be 'centralized and highly bureaucratic' (Morris, 1995: 92). However, while these agencies represent numerous attempts to improve the effectiveness of physical education, their efforts are outnumbered by the wide range of school practices in physical education. One physical education teacher who was interviewed observed: 'School PE in Hong Kong varies widely with some teachers making a lot of effort to improve their programs while others just throw a ball to the students and go to read the newspaper.'

#### *Policy-making – the planner's view*

In the past, the curriculum was developed by the establishment of committees based on school subjects, resulting in the introduction of a vast range of new subjects and a revision of existing subject-based curricula (Morris, 1995:

92). According to officials in the various agencies in Hong Kong, the process of implementation of the intended curriculum before September 1999 followed a complex pattern of directing, writing and evaluating. The following response from an official working in one of the agencies described efforts made by the various appointed and executive members of the Curriculum Development Committee (recently renamed the Curriculum Development Council) in the writing of curriculum:

The actual 'writing' process varies a lot, most likely to be jointly written by officers [cum] members in the form of working groups. The first draft efforts are then reviewed and comments are noted and when agreement has been met the final product is subsequently endorsed by all members. The initiation of revising or introducing a new syllabi/subject also varies and is subject to the voices of committee members, public pressure, views of academics, the influence of foreign ideas, HKEA (Hong Kong Examination Authority), employer/private sectors, and even pressure groups. Some initiatives may fall out on the way, while some may succeed. Before September 1999, they would be endorsed by the CDC co-ordinating committees of relevant level (primary, secondary, sixth form).

It appears that the CDC considers the concerns of various interest groups and carefully shapes policy in an effort to respond to the politically sensitive nature of the stakeholders' concerns. Policy is manifested through the trial and evaluation of curriculum materials that are tested in the field. A curriculum officer briefly described the way in which this testing took place. 'The old process (before 1999) of implementation after policy documentation, was "piloting", training of teachers, implementation in schools, and finally monitoring by subject "inspection" of schools.'

The decentralization of the Hong Kong education system has already changed the way in which this former process of curriculum change materialized. Some of the physical education teachers interviewed suggested that school-based curriculum development was already being implemented. One physical education teacher from another school said, 'We are being asked to design learning experiences that are appropriate for specific schools and the needs of students.' School-based strategies have affected most aspects of education. One official from the CDC observed that 'new freedoms for teachers' were not always accepted or used:

With the introduction of the concept of school-based curriculum development, there is actually more freedom for schools to modify their teaching plan, though most do not. Theoretically, all syllabi are circulated to teachers through school heads, and they could be purchased in the government publication office as well. However, some

teachers claim that they only refer to textbooks. This is especially common in primary schools.

Examples of school-based curriculum development are numerous. However, the education system has not yet established an effective method of providing the necessary mechanism and support to ensure that teachers are first aware of the curriculum ideas, and secondly, if they require assistance in implementing them.

The following extract is an example of what happened when a university physical education specialist submitted a set of materials to the Education Department for use in schools.

I designed a fitness unit for physical education classes that was appropriate for the Hong Kong setting. I was even recognized with a plaque in recognition of my contribution and (I suppose) the quality of the project. But that was three years ago and the project has not been implemented yet. The teaching materials are stored in the curriculum office and although the unit design is listed in their materials nothing has come of it.

At least, what can be deduced from the above description is that a policy and a set of materials do exist and they are intended for the use of physical education teachers in Hong Kong schools. Unfortunately, there appears to be a lack of effective mechanisms to ensure that teachers feel a sense of obligation to consider and try new ideas. More importantly, there seems to be a weak system of support for teachers in their effort to implement new ideas. What remains unclear is what effects decentralization will have on curriculum planning and whether the departure from more centralized traditional approaches will widen the gap between the intended curriculum and what is implemented. It is now beginning to look as if the bureaucratically prescribed curriculum is gradually giving way to a school-based curriculum in which (as of September 1999) the ED commenced a process of restructuring agencies such as the CDC and the CDI. This restructuring includes strategies to involve practitioners as well as school principals and policy-makers.

#### *Absence of pressure and support*

Government agencies in Hong Kong work alone, with no executive power to apply pressure, and few assigned resources to lend support. The apparent 'isolationism and privatism of educational systems' (McCulloch, 1998: 1203) results in a lack of co-ordination between the policy-makers and school practitioners, so the curriculum is shaped on at least two entirely separate levels. At the policy or technocratic level (Sergiovanni, 2000), it is developed without the full co-operation or consultation of the schools in which it is

intended to be effective. At the school or democratic level (Sergiovanni, 2000), curriculum evolves through the constructs of principals, teachers and students, while the efforts of the agencies are discounted and often excluded from the discourse of pedagogy. The investigation into the various government agencies revealed that they worked without overall co-ordination and with little authority. This is manifested in the efforts to establish physical education as an examination certificate subject. The ED responsible for the administration of schooling in Hong Kong worked alongside the CDI and the CDC. The Hong Kong Examination Authority (HKEA) provided an examination syllabus and guidelines for teachers who taught subjects that would be examined by the Hong Kong Certificate of Education Examination (HKCEE). However, while they work alongside each other, there seemed to be no orchestration of their efforts. For example, there appears to be no attempt to expand the physical education examination offered in the schools, even though the syllabus and examination were approved in 1991, indicating the absence of power of the agency. If schools do not wish to introduce physical education as an examinable subject there are no repercussions, because such agencies as the CDC provide advice, but have no power to mandate its proposals. Consequently, the norm for most schools is to offer the minimum number of two periods as opposed to the maximum of four physical education classes each cycle. This lack of power to apply pressure is evident in how teachers expressed their indifference to, and resistance against, the proposals by government agencies to use school-based initiatives to deliver their policies.

Observers who have examined the problem of implementation of change have suggested that to increase the likelihood of success, a fine balance between pressure and support is required (Fullan, 1991; Barber 1998). Pressure is suggested in the form of targets to be achieved, published performance data and independent inspections. In contrast, support takes the form of consistent resourcing, professional development, investment in school-based innovation and a reduction of workload. Elements of pressure of support are not apparent in the education policy for reform in the Hong Kong setting.

### SCHOOL PRACTICE – A TRANSFORMATIONAL ANALYSIS

In order to understand the implementation problem, this article will now shift focus from the policy-makers to the practice perspective of teachers and the diversity of their experiences that tend to fall outside 'formal policy and organization lines' (McLaughlin, 1998: 74). Cuban's (1998) criteria of fidelity, effectiveness, popularity, longevity and adaptability provide a theoretical

framework which facilitates the examination of teachers' subjective experiences as they relate to change and subsequent enactment of any government policies that may have affected their daily practices.

### *The effectiveness and fidelity standard*

In discussing the various approaches that have been taken by agencies in implementing school reform, Snyder, Bolin and Zumwalt (1992) suggested that the fidelity approach requires the full co-operation of teachers to implement what is intended as curriculum change. Cuban has also observed that 'the fidelity standard aims at assessing the fit between the initial design, the formal policy, the subsequent program and its implementation' (1998: 4). From what can be concluded, the agencies that set policy and write the supportive materials have no power or bureaucratic structure to ensure the implementation of the policy or even the use of the materials. Second, it was discovered that teachers' concerns were not about government policy and why it had not become current practice but about immediate matters affecting their everyday work. Teachers did not feel obliged to carry out the wishes of government agencies because there was no pressure to do so and, more importantly, no support to assist in the process. Therefore, teachers were indifferent to and even cynical about the suggested curriculum and they questioned the ability of the government to implement curriculum change. The head of the school's physical education department commented on the government's ability to carry out its plans:

The resource is not enough in general. For example, the government wants 'IT' taught in the school but they don't give enough human resource or technical support. So in terms of the policy I would say that they have a very good goal but they lack the long-term support and arrangements to back it up. So very often the aim and the implementation are far apart.

I would say the policy is not realistic, I would say that the kind of objectives are more ideal than real. The trouble is when it comes to implementation, the government may not have enough resources or support for that. I would say that the Education Department's aims are a little too high sounding.

There were no indications that teachers or the school intended to become involved in any of the suggestions made by the ED. The vice-principal and subject teachers suggested that the ED policy was only a general guide and not to be interpreted literally. Their disregard for government agencies was understandable. Subject teachers felt more accountable to the principal and school administration than they did to the 'faceless' bureaucracy of the ED. The main complaint by the teachers was that the ED's aims were broad and

without clear directions for implementation and one could not hope to follow such vague expectations. Besides, they believed that the serious decisions of what to include in the school curriculum lay with the principal, the panel heads of subjects and the subject teachers. Although the teachers were critical of the government's lack of documentation on curriculum implementation, they were unable to provide a written curriculum or any statement that reflected the philosophy, aims or objectives of their own physical education programme. Issues regarding the organization of classes and specific lesson preparation were decided at appropriate levels of the school administration, resulting in only a general understanding of what was to be taught. Nothing reached the written stage of formalization. In the following extract the vice-principal of the school observed that decisions by the ED about curriculum were eventually examined and modified by the physical education teachers.

I think the PE department follows instructions from the Education Department and we will consider their suggestions as they would be applied in our school. Mainly we would refer to the core curriculum suggested by the Education Department and we would insert certain additions such as a fitness component including fitness training and sports not available in other schools. So in that regard, we may be different to other schools. I would say the decisions are made at the department level by our PE teachers.

The ED influenced the school through its role as observer of the practices rather than as an inspector of the policies. However, the vice-principal suggested that the department was too interfering and probably exceeded its mandate. She suggested that:

The role should be a facilitator and to provide advice. But they always come to the school as inspectors telling us what we are doing is wrong and how we use the funding, etc. Or they tell us that we are not conducting the lessons properly and they sound so superior. I don't think they should do something like that.

When the effectiveness of policy is evaluated by the fidelity standard there is an assumption that the intended policy will be zealously implemented by teachers who have been assigned the custody of the plan. Clearly, from the subjective experiences of the teachers in this study, it is not possible to apply the measure of effectiveness that the fidelity standard facilitates. First, there was no clear policy that determined a specific curriculum to be followed. Second, the teachers in this study did not adhere to the guidelines and suggestions set down by the ED. Third, the school administration provided no evidence to suggest that they were aware of, or interested in, what passed as the physical education curriculum. They assumed that the physical education

head was competent and dedicated to his profession and offered the best programme possible.

### *The popularity standard*

Popularity is concerned with political power and the symbolically significant markers of educational reform as a measure of success. Therefore, a measure of success would be indicated if the proposals suggested by the government were accepted by the community in general and the schools in particular. Taxpayers play less of a role in Hong Kong politics than they would in countries such as the United Kingdom or the United States. First, because the tax base in Hong Kong is confined to the relatively wealthy and because schools are not totally dependent on the resources associated with the political support of local politicians. Nevertheless, taxpayers as parents exert considerable force on schooling in Hong Kong and consideration of their wishes must be acknowledged. Consequently, school reform in recent times has reflected the government's desire to popularize its policy by addressing the needs of the total community. The following statements describe the new role of education and indicate the government's aim to recognize parents and the community:

Parents and the community attach much importance to the education for our young children. . . . For Hong Kong education to meet the expectations of society and fulfil its historic mission, we should spare no effort in preserving and promoting these good traditions. (Education Commission, 2000)

While this rhetoric is patronizing and is intended to appeal to the public, the attempt to ensure the popularity of public educational policy in Hong Kong is not aimed at the taxpayer. The report by the Education Commission is aimed at the practitioners 'who are the foot-soldiers of every reform aimed at improving student outcomes' (Cuban, 1998: 4) and who, it is now recognized, determine the future of educational reform.

Snyder, Bolin and Zumwalt (1992) identified a softer approach now taken by governments, as they move away from a top-down strategy to what they termed 'mutual adaptation' that requires careful negotiation and interaction between the curriculum developers and the teachers. From the data collected in this study, it is clear that the government has a considerable distance to travel before it can consider that its policies have been successful in meeting with popular acceptance. The lack of popularity is associated with the degree of sensitivity demonstrated by the various agencies. This is not to suggest that agencies are blatantly ignoring the teachers, it is more a case of the individuals in the agencies being preoccupied with their own responsibilities of producing materials and documents to satisfy the internal expectations of the

agencies themselves. While there are attempts to interact with teachers and encourage them to assist in the design of appropriate learning experiences, teachers suggested that they were consumed with duties associated with teaching and had little opportunity to consider suggestions made by the CDI, CDC, HKEA or the ED.

Other indicators of the popularity of the curriculum changes show that teachers did not follow the curriculum policy and in many cases were unfamiliar with its content because they had refused to read it. The following quote, by a physical education teacher from another school, represents a common attitude towards education policy:

I really don't like those documents. They are a waste of time. I am here to teach, to manage the class, and I don't like to read those documents. I know they exist but I don't like to read them. I know something about the aims of education but I am not that familiar with them. The aims are concerned with the cognitive, affective and psycho-motor development as well as self-esteem. These are generally what we aim to achieve.

I discovered that the observation by this teacher was consistent with the practices I observed in the case school, in which teachers followed school-based unit plans that were formulated by the school's physical education department and sanctioned by the school administration. While other studies on curriculum change have indicated that teachers adapt, re-create and modify 'curriculum to fit their own perspectives on and beliefs about physical education' (Curner-Smith, 1999: 82), teachers in this study presented a confused picture of what is meant by curriculum. This confusion emanated not only from the documents produced by the numerous agencies but also from the insensitive way in which curriculum ideas are delivered.

One of the factors that indicates the insensitivity of the government agencies is that they tend to ignore, or are unable to assess, the will and capacity of teachers. Physical education teachers represent the crucial link between policy and practice because they ultimately decide what methods are to be used, the styles of learning that are permitted and, most importantly, what is to be taught. What becomes the reality of the school curriculum in times of change is largely based on the ability of the school to resource and structure the change. Even though the teachers considered the aims set down by the ED to be acceptable, they expressed frustrations about the insufficient resources that were available to support the curriculum suggestions for change.

I think they (the Education Department) address the framework but nothing else gets done. Maybe they are not in touch with the student and the real situation and environment of the school. I think they should develop guidelines for implementation.



I would say that the teachers want to follow the aims but it is not easy. There are many factors that make it difficult to follow the policy. We have so much to do and there is so much to consider. We organize plenty of clubs and student societies, sports teams and even variety shows but the students want to do things on their own out of school.

At this point in time, the popularity of government policies towards school reform is low and the process of mutual adaptation does not apply in this educational setting. Teachers' perspectives are fundamentally rooted in a different set of premises of action and quite often they have different goals than those of the outside researcher, policy analyst or policy-maker (McLaughlin, 1998: 74). Adaptation of the policies in Hong Kong in general is neither interactive nor negotiated, because there is not a strong working relationship between members of the government agencies and the practitioners in the schools. While the commencement of consultation with teachers has begun, teachers are not fully convinced that the agencies representing curriculum change and school reform have developed an effective policy that reflects the needs of specific settings. It is therefore not surprising that the popularity of the government initiatives is low.

#### *The longevity and adaptability standard*

The failure of top-down approaches in other countries (Fink and Stoll, 1998) has apparently had an effect on the approach to educational change in Hong Kong. While the move towards a 'bottom-up' or school-based reform increased the involvement of the practitioner and emphasized educational processes rather than educational management (Reynolds, 1988), it was eventually realized that this approach does not necessarily lead to improvement in student performance (Reynolds, Hopkins and Stoll, 1993). What is more evident now is the tendency to accept that the larger system will provide direction and support and the actual change process will be enacted through school-based decision-making and school development planning (Fink and Stoll, 1998).

Educational reform in Hong Kong has reflected this trend towards enactment through a school-based approach. While this approach recognizes the crucial role that teachers play, it also exposes a number of difficulties involved in implementing curriculum. An enactment approach that is school based is open to interpretation and is prone to a wide range of practices (Bowe, Ball and Gold, 1992; Laws and Aldridge, 1995). Moreover, it is likely that the policy as written by the ED will not materialize in the form that was intended and will therefore exist for only a short time.

The standard of longevity, if applied in Hong Kong, would clearly indicate that educational reform is having considerable difficulties in being accepted.

Teachers are cynical about education reform and question its sincerity, because they have been exposed to educational restructuring in the form of numerous proposals. During the 1990s, having adopted a policy of decentralization, the Hong Kong government proposed three major restructuring initiatives: these were the School Management Initiative (Education and Manpower Branch and Education Department, 1991), the Target-Oriented Curriculum (Morris, Lo, Chik and Chan, 2000; Education Department, 1994), and the Quality School Education (Education Commission, 1996). Conclusions from the Education Department (1998) on the implementation of the Target-Oriented Curriculum stated that 'TOC progress is slow and somewhat patchy' (1998: 23). Similarly, each programme has met with considerable resistance, thus making it difficult to assess its effectiveness. In fact, teachers use these programmes as an illustration of their scepticism. One of the subject teachers observed the following when asked about the Education Department's policies on curriculum reform:

I would say that they (government agencies) do not have a very good long-term policy. Suddenly they have an idea of what's good such as Quality Education or TOC (Target-Oriented Curriculum) and the school has to implement such things. Finally you get some material on it and then you wait for the guidelines but they never come and they switch to other objectives that they think may be important.

It is difficult to decide whether programmes proposed by agencies such as the CDI, ED and EC are short lived and unsustainable because there is an absence of a highly interactive infrastructure of pressure and support (Fullan, 2000: 23–4) or because practitioners have taken advantage of the opportunity to use school-based decision-making. For whatever reason, school reform initiatives in Hong Kong do not endure and modifications to school programmes in physical education reflect the general implementation problem. It is apparent that teachers are more receptive to the practice of adapting policy initiatives than they are to adopting them. School physical education is determined by local context, needs and interests, particularly because the subject is marginalized (Johns and Dimmock, 1999) and its practitioners are concerned about both organizational survival and their own. The local context within which teachers work is less formal and generates conditions that allow the replacement of reform goals set by the agencies with their own less formal ways of accomplishing what needs to be done. The head of the school's physical education department described how decisions about the curriculum were made in his school.

Actually the principal trusts me because I have been here for so many years now. So he knows that I will make a good decision. So after I have made a decision, I share it with the principal to get him involved. Also

we have a panel meeting to discuss it because I know that involvement and participation are very important.

The way policy is implemented is at the department level. We have an ideal framework and the department will have a meeting and we'll discuss how to deal with the direction. For example, the board [the school board] will direct the department by asking the department to modify the curriculum, integrating new aspects, etc. So, in effect, the curriculum is created by the department members.

To this teacher the government policy is less relevant in shaping the curriculum than the more informal, personal and immediate factors that interplay in his daily practice. The contrast between the technocratic level of government policy and the lifeworld of the school (Sergiovanni, 2000: 61), with its own values, purposes and beliefs, is evident. Generally, curriculum is determined within the school by the co-ordinators and teachers and their decisions are made without consultation or consideration of the intentions of the government agencies. More significantly, the decisions are a reflection of the local values and purposes of the teachers and administrators who are concerned with immediate issues that directly affect the running of the programme and ultimately will enable the school to function optimally. Adaptation appears to be a suitable criterion to assess the success of curriculum change.

## DISCUSSION

The theoretical concepts suggested by Cuban (1998) have assisted in providing a framework to analyse the success of curriculum policy implementation. Cuban suggested that schools are not only the target of reform, they also alter the process and intent of reform. Consequently, the more conventional evaluation standards of fidelity and effectiveness are no longer appropriate because the assumption that centralized reform can be delivered unchanged to the classroom is no longer valid. Alternatively, the standards of longevity and adaptability, and possibly popularity, may have some relevance in assessing the effectiveness of certain curriculum changes. It is the intention of this summary to show that both longevity and adaptability are useful criteria because they indicate the degree to which school reform makes the transformation from rhetoric to reality.

Apart from indicating that education reform problems in Hong Kong resemble those in other cultures around the world, these criteria also demonstrate that 'substance is typically subordinate to process' (Sergiovanni, 2000: 62). Generally, the literature on school change exposes an axiomatic gap between what is intended by the technocratic elites who decide the direction

of change and the democratic setting of schools, driven by the needs and desires of students, teachers and parents (Sergiovanni, 2000: 62). Agencies in Hong Kong are typically what Habermas (1987) called 'systemworlds'. They are characterized by their preoccupation with decisions of management protocols, policies and procedures, strategies and tactics and, most importantly, accountability. Schools, in contrast, are what Habermas (1987) termed 'lifeworlds'. They flourish on unique traditions, rituals and norms that define the school's culture. When this lifeworld is nurtured by effective leadership within the school, it grows strong. However, when the school character is threatened by external forces such as those that are at work in the process of education reform (systemworlds), the lifeworld of the school erodes (Sergiovanni, 2000).

The gap between what is planned and what materializes as curriculum, in Hong Kong, is substantial, but it is not intentionally created. Among the technocratic elites (Sergiovanni, 2000) are many sincere individuals who wish to see changes that will bring about improvements in school effectiveness. Noted for its highly bureaucratic policies, the government received substantial criticism over the perceived centralized control of curriculum decision-making (Morris, 1995: 94) and has attempted to portray an image that is less autocratic by reducing centralized curriculum decisions (Morris and Chan, 1997). The government has demonstrated this by emphasizing more school-based reforms such as Schools Management Initiative (SMI) (Education and Manpower Branch and Education Department, 1991) and has also assigned new responsibilities including setting curriculum policy to the CDC, the CDI and the ED.

Ironically, the results of the efforts towards devolution are disarticulated, promote ideological contradictions (Morris, Lo and Adamson, 2000) and lack an effective presentation to reveal their relevancy to the practitioner. In addition, these devolutionary and bureaucratic moves have resulted in a fragmentation of advisory policies and practices. The regular reports from the EC combined with ED and CDC initiatives are supposed to create an image of co-ordination at the legislative, executive and bureaucratic levels of the political system. Instead, the policies are at odds and contradict one another as their proponents attempt to promote and defend one programme at the expense of another (Morris, Lo and Adamson, 2000). Consequently, the impotence of these initiatives to promote curriculum change is manifested in the way programmes fade away before they have been tried and tested in the school setting. Therefore, the longevity of government initiatives is a strong indication of the degree of willingness of the community to tolerate and accept new ideas long enough for them to be tested, evaluated, modified and finally implemented.

The implementation problem in education reform is not only the result of the ineffectiveness of government agencies. An examination of the teachers'

experiences and perspectives must also take place. It is their lifeworld that is threatened, and because no consensus has been reached about what constitutes effective schools (Cuban, 1998), their criteria for student improvement diverges from the policy-makers' ideas of reform. Physical education teachers in this study, as in other parts of the world, indicated that their lives were overlooked and their concerns were subordinated to the technocratic emphasis on process (Sparkes and Templin, 1992; Macdonald, 1999). As with other subject teachers, concern over the deprofessionalization of teachers has assumed a prominent place in arresting the decline of schooling effectiveness (Hargreaves, 1994; Popkewitz, 1994). In Hong Kong there has been an emergence of a 'critical radicalism that is based on stereotyped portrayals of prevailing practices and comparisons with an idealized future' (Morris, Lo, and Adamson, 2000: 249). This perspective may have served to reinforce a perception that the professional skills of teachers' standards were below those necessary for the successful implementation of the reform programmes.

It is simplistic to criticize all physical education teachers as deficient, but the level of professional preparation for many of them may not have prepared them to cope with the sociological and micro-political reconfigurations that are often associated with school reform. In addition, the practical concerns of teachers over operational and evaluation details are invariably missing from the reform proposals, and the materials that are distributed do little to address the local factors such as 'local expertise, organizational routines [and] resources available to support change' (McLaughlin, 1998: 72). It is in these circumstances that school reform must be considered because, as McLaughlin has observed, 'to ignore context is to ignore the very elements that make policy implementation a "problem"' (1998: 79). Technocratic decisions involve processes that are rational and cognitive rather than emotional or personal. Decent working conditions, respect and support from the school community and administration and other factors which, when ignored or trivialized, often trigger emotional outbursts on the process of educational change, as though 'teachers think and act; but never really feel' (Hargreaves, 1998: 558-9).

From the subjective experiences reported in this study, it is apparent that teachers would be more comfortable with reform if the policy-makers were more sensitive to the settings in which teachers operate. More importantly, the way in which reform is proposed must allow teachers to own, adapt and blend proposed reforms with existing practices that have been shown to be effective (Morris, Lo and Adamson, 2000: 258). Education reformers must regard teachers as professionals who are sufficiently skilled to undertake the proposed changes in ways that transform plans into everyday practices. To engage teachers because of their classroom experience is to respect their wisdom and not simply to regard them as technicians. Strategies that depend on the teacher's ability to adapt and implement reform invite the teachers'

engagement rather than their resistance. The measure of effectiveness as evaluated on the basis of adaptability is perhaps a criterion that is worthy of consideration.

## REFERENCES

- Barber, M. (1998) 'National strategies for educational reform: lessons from the British experience since 1988'. In Hargreaves, A., Leberman, A., Fullan, M. and Hopkins, D. (eds) *International Handbook of Educational Change*. London: Kluwer Academic Publishers; 743–67.
- Bowe, R., Ball, S. J. and Gold, A. (1992) *Reforming Education and Changing Schools: Case Studies in Policy Sociology*. London: Routledge.
- Chan, W. K. D. and Johns, D. P. (1998) 'Implementing new programs: the case of physical education'. *Educational Research Journal* 13(2): 176–95.
- Cote, J., Salmela, J., Trudel, P., Aberrahim, B. and Russell, S. (1993) 'The coaching model: a ground assessment of expert gymnastic coach's knowledge'. *Journal of Sport and Exercise Psychology* 17: 1–17.
- Cuban, L. (1998) 'How schools change reforms: redefining reform success and failure'. *Teacher College Record* 99(3): 453–77.
- Curriculum Development Committee (1988) *Syllabuses for Secondary Schools: Physical Education (Secondary I-V)*. Hong Kong: Education Department.
- Curriculum Development Council (1995) *Syllabuses for Primary Schools: Syllabus for Physical Education (Primary I-V)*. Hong Kong: Education Department.
- Curriculum Development Council (2000) *Membership of the Council, Standing Committees and Curriculum Development Council Committees (1999–2000)*. Hong Kong: Education Department.
- Curriculum Development Institute (1994) *Supporting Materials on Physical Education for Secondary Schools* (2nd edn). Hong Kong: Education Department.
- Curtner-Smith, M. D. (1999) 'The more things change the more they stay the same: factors influencing teachers' interpretations and delivery of National Curriculum physical education'. *Sport, Education and Society* 4(1): 75–97.
- Dimmock, C. and Walker, A. (1998) 'Transforming Hong Kong schools: trends and emerging issues'. *Journal of Educational Administration* 36(5): 476–508.
- Education Commission (1996) *Quality School Education*. Hong Kong: Education Commission.
- Education Commission (1999) *Education Blueprint for the 21<sup>st</sup> Century*. Hong Kong: Education Commission.
- Education Commission (2000) *Learning for Life Learning through Life: Reform Proposals for the Education System in Hong Kong*. Hong Kong: Education Commission.
- Education Department (1994) *Report of the Advisory Committee on Implementation of Target-Oriented Curriculum*. Hong Kong: Education Department.
- Education Department (1998) *An Investigation into the Development and Implementation of the TOC Initiative*. Hong Kong: Education Department.
- Education and Manpower Branch and Education Department (1991) *The School*

- Management Initiative: Setting the Framework for Quality in Hong Kong Schools*. Hong Kong: Education Department.
- Evans, J. and Penny, D. (1992) 'Investigating ERA: qualitative methods and policy oriented research'. *British Journal of Physical Education Research Supplement* 11: 2-7.
- Evans, J. and Penny, D. (1995) 'The politics of pedagogy: making a National Curriculum physical education'. *Journal of Education Policy* 10(1): 27-44.
- Evans, J. and Williams, T. (1989) 'Moving up and getting out: the classed, gendered career opportunities of physical education teachers'. In Templin, T. and Schempp, P. (eds), *Socialization in Physical Education: Learning to Teach*. Indianapolis, IN: Benchmark Press; 235-49.
- Fink, D. and Stoll, L. (1998) 'Educational change: easier said than done'. In Hargreaves, A., Leiberman, A., Fullan, M. and Hopkins, D. (eds), *International Handbook of Educational Change*. London: Kluwer Academic Publishers; 297-321.
- Fullan, M. (1982) *The Meaning of Educational Change*. Ontario: Ontario Institute of Education, OISE Press.
- Fullan, M. (1991) *The New Meaning of Educational Change*. London: Cassell.
- Fullan, M. (1998) 'The meaning of education change: a quarter of a century of learning'. In Hargreaves, A., Leiberman, A., Fullan, M. and Hopkins, D. (eds), *International Handbook of Educational Change*. London: Kluwer Academic Publishers; 214-28.
- Fullan, M. (2000) 'The return of large-scale reform'. *Journal of Educational Change* 1: 5-28.
- Habermas, J. (1987) 'The theory of communicative action'. *Lifeworld and System: A Critique of Functional Reasoning*, Vol. 2. Boston: Beacon Press.
- Hargreaves, A. (1994) *Changing Teachers, Changing Times*. London: Cassell.
- Hargreaves, A. (1998) 'The emotions of teaching and education change'. In Hargreaves, A., Leiberman, A., Fullan, M. and Hopkins, D. (eds), *International Handbook of Educational Change*. London: Kluwer Academic Publishers; 558-75.
- Hargreaves, A., Leiberman, A., Fullan, M. and Hopkins, D. (eds), *International Handbook of Educational Change*. London: Kluwer Academic Publishers.
- Harris, J. (1993) 'Physical education in the National Curriculum: results of a pilot study in secondary schools'. *British Journal of Physical Education* 24(4): 36-40.
- Johns, D. and Dimmock, C. (1999) 'The marginalization of physical education: impoverished curriculum policy and practice in Hong Kong'. *Journal of Education Policy* 14(4): 363-84.
- Laws, C. and Aldridge, M. (1995). 'Magic moments, myth or milestone - the implementation of National Curriculum physical education'. *British Journal of Physical Education Supplement* 16: 2-12.
- Locke, L. (1998) 'Advice, stories and myths: the reactions of a cliff jumper'. *Quest* 50: 238-48.
- Macdonald, D. (1999). 'The "professional" work of experienced physical education teachers'. *Research Quarterly for Exercise and Sport* 70(1): 41-54.
- McCulloch, F. G. (1998) 'Curriculum reform, educational change and school improvement'. In Hargreaves, A., Leiberman, A., Fullan, M. and Hopkins, D.

- (eds), *International Handbook of Educational Change*. London: Kluwer Academic Publishers; 1203–15.
- McLaughlin, M. W. (1998) 'Listening and learning from the field: tales of policy implementation and situated practice'. In Hargreaves, A., Leiberman, A., Fullan, M. and Hopkins, D. (eds), *International Handbook of Educational Change*. London: Kluwer Academic Publishers; 70–84.
- Miles, M. and Huberman, A. (1984) *Qualitative Data Analysis: An Expanded Sourcebook*. Newbury Park, CA: Sage.
- Morris, P. (1995) *The Hong Kong School Curriculum: Development, Issues and Policies*. Hong Kong: Hong Kong University Press.
- Morris, P. and Chan, K. K. (1997) 'The Hong Kong school curriculum and the political transition: politicization, contextualization, and symbolic action'. *Comparative Education* 33(20): 247–64.
- Morris, P., Chan, K. K. and Lo, M. L. (1998) 'Changing primary schools in Hong Kong: perspectives on policy and its impact'. In Stimpson, P. and Morris, P. (eds), *Curriculum and Assessment for Hong Kong*. Hong Kong: Open University of Hong Kong Press; 201–22.
- Morris, P., Lo, M. L. and Adamson, B. (2000) 'Improving schools in Hong Kong – lessons from the past'. In Adamson, B., Kwan, T. and Chan, K. K. (eds), *Changing the Curriculum: The Impact of Reform on Primary Schooling in Hong Kong*. Hong Kong: Hong Kong University Press; 245–62.
- Morris, P., Lo, M. L., Chik, P. M. and Chan, K. K. (2000) 'One function, two systems – changing assessment in Hong Kong's primary schools'. In Adamson, B., Kwan, T. and Chan, K. K. (eds), *Changing the Curriculum: The Impact of Reform on Primary Schooling in Hong Kong*. Hong Kong: Hong Kong University Press; 195–216.
- Nieto, S. (1998) 'Cultural difference and educational change in a sociopolitical context'. In Hargreaves, A., Leiberman, A., Fullan, M., and Hopkins, D. (eds), *International Handbook of Educational Change*. London: Kluwer Academic Publishers; 418–39.
- O'Sullivan, M., Tannehill, D., Knop, N., Pope, C. and Henniger, M. (1999). 'A school–university collaborative journey towards relevance and meaning in an urban high school physical education program'. *Quest* 51: 225–43.
- Popkewitz, T. (1994) 'Professionalization in teaching and teacher education: some notes on its history, ideology and potential'. *Teaching and Teacher Education* 10: 1–14.
- Reynolds, D. (1988) 'British school improvement research: the contribution of qualitative studies'. *International Journal of Qualitative Studies in Education* 1(2): 143–54.
- Reynolds, D., Hopkins, D. and Stoll, L. (1993) 'Linking school effectiveness knowledge and school improvement practice: towards a synergy'. *School Effectiveness and School Improvement* 4(1): 37–58.
- Sallis, J. F. and McKenzie, T. L. (1991) 'Physical educator's role in public health'. *Research Quarterly for Exercise and Sport* 62: 124–37.
- Sergiovanni, T. J. (2000) 'Changing change: toward a design science and art'. *Journal of Educational Change* 1: 57–75.



- Snyder, J., Bolin, F. and Zumwalt, K. (1992) 'Curriculum implementation'. In Jackson, P. (ed.), *Handbook of Research on Curriculum*. New York: Macmillan.
- Sparkes, A. (1987) 'Strategic rhetoric: a constraint in changing the practice of teachers'. *British Journal of Sociology of Education* 40: 37–54.
- Sparkes, A. (1991) 'Curriculum change: on gaining a sense of perspective'. In Armstrong, N. and Sparkes, A. (eds), *Issues in Physical Education*. London: Cassell.
- Sparkes, A. and Templin, T. (1992) 'Life histories and physical education teachers: exploring meanings of marginality'. In Sparkes, A. (ed.), *Research in Physical Education and Sport*. London: Falmer Press; 118–45.
- Tesch, R. (1990) *Qualitative Research Analysis Types and Software Tools*. New York: Falmer.
- Walker, A. and Dimmock, C. (1998) 'Hong Kong's return to mainland China: educational policy in times of uncertainty'. *Journal of Education Policy* 13(1): 3–25.