YIN CHEONG CHENG

GLOBALISATION AND EDUCATION REFORMS IN HONG KONG: PARADIGM SHIFTS

1. INTRODUCTION

Hong Kong is an international city and a meeting point of the West and the East, with a strong tradition of echoing global trends. As in some other parts of the world in recent years, education in Hong Kong has experienced two waves of reforms and is starting a third wave in this era of globalisation. The three waves of educational reforms are based on different paradigms and theories of educational effectiveness, and they employ different strategies and approaches for changing schools and education (Cheng, 2001a; 2002). Since the 1970s, the first wave emphasised internal effectiveness with a focus on internal process improvement through external intervention. Since the mid-1990s, the second wave pursued interface effectiveness in terms of school-based management, quality assurance, accountability, and stakeholders' satisfaction, focusing on macro-social reforms. Now, in response to challenges of globalisation, information technology, and a knowledge-driven economy for the new century, Hong Kong is starting a third wave of educational reform pursuing future effectiveness concerned with future generations and a globalised society. Reflecting on the issues of the first and second waves of education reforms, this chapter aims to analyse how Hong Kong, as an international city, is addressing the challenges of globalisation as it moves towards the third wave of educational reform. Implications for policy development, reform practice and research in international contexts are also discussed.

2. THE CHANGING CONTEXT AND REFORM

In the 1960s and 1970s, Hong Kong, a small British colony geographically and economically close to socialist China, operated in a relatively special and stable political environment, striving to achieve a steadily growing economy through developing its manufacturing industries and regional trade. Since the late 1970s, with the implementation of compulsory education, the school system expanded quickly in both primary and secondary education in order to meet the challenges of

rapid economic growth. In the 1990s, after the drastic expansion of the school system and the transition of Hong Kong from a predominantly labour intensive manufacturing economic system to an international financial and business centre, Hong Kong shifted its attention in an effort to focus education on quality rather than quantity and to increasing resources to ensure accountability and effectiveness. Particularly in the past ten years, Hong Kong society has been experiencing numerous challenges as it undergoes a transformation due to the fast-changing economic environment in the Asia-Pacific region and due to the political transition in July 1997, from a British colony to a Special Administrative Region (SAR) of China. Policy-makers and the public have not had high expectations in terms of the role and functions of education (Cheng, 2001b).

In the above context, a number of educational policies for educational change were initiated in Hong Kong. From 1984 to 2000, the Education Commission published seven reports (Education Commission, 1984-1997), and reviewed reports and reform proposals (Education Commission, 1999a & b, 2000, May & September). Reports No. 1-6 (Education Commission, 1984-1996) and other earlier policy reports can be classified as the source of policy initiatives of the *first wave reform*. The policy recommendations in report No. 7 (Education Commission, 1997) and the related initiatives by the Hong Kong SAR government between 1997 and 2000 are the key components of the *second wave reform* in Hong Kong (Cheng 2000b). The line of thinking and strategies adopted in Report No. 7 and some related initiatives (e.g., Education Commission 2000, May & September) are contrastingly different from those in the previous reports.

Since 1997, the formulation of the second wave of reforms has raised some important concerns about better education among the wider public, but at the same time the formulated strategies and their implementation have been confronting serious difficulties and challenges. In particular, Hong Kong is now experiencing a financial deficit, an economic transformation, and a high unemployment rate. Many people are losing their confidence in the second wave of reforms and doubt whether the ongoing education initiatives can bring a successful future for Hong Kong. Most recently, curriculum reform has been started by the Hong Kong government to promote a paradigm shift in teaching and learning with the hope of developing a culture of "lifelong learning," and "learning to learn," thus enhancing students' ability to adapt to the fast-changing knowledge-based society and meeting the challenges of globalisation and information technology (Curriculum Development Council, 2001). There are indications of an the emergence of a third wave of education reform in Hong Kong with an emphasis on pursuing effectiveness of education (Cheng, 2001b).

3. THE FIRST WAVE OF EDUCATIONAL REFORM

The first wave of educational changes and development in Hong Kong had its roots in the assumption that the policy makers have clear aims for education and are able to find the best practices that enhance effectiveness or optimal solutions for solving major problems for all schools at the school-site level. This wave was

generally characterised by a top-down approach with an emphasis on external intervention or increasing resources and with a focus on a limited number of aspects of educational practice. In reports No. 1 through to 6, the policies which were directly related to efforts for educational changes and development in schools included the following areas: language teaching and learning, teacher quality, private sector school improvements, curriculum development, teaching and learning conditions, and special education.

Some of the policies proposed by the Education Commission have been implemented, while some are still being carried out; that is, if they have not been suspended and changed into other forms, due to the lack of financial support or challenges from the public. Results of some implemented policies have not seemed encouraging, in terms of their impact on the improvement of school education. Based on a top-down approach and ignoring school-based needs, the policy effects of the first wave reforms were quite limited and fragmented (Cheng, 2000a).

4. THE SECOND WAVE OF EDUCATION REFORM

Education Commission (1997) Report No. 7 and the recent initiatives of the Hong Kong SAR Government since 1997 have formed the major part of the second wave of education reforms. This wave shares some important features of international reform efforts, with their emphasis on quality assurance, stakeholders' satisfaction, accountability, and school-based management.

4.1 School-based Management

One of the major second wave initiatives was to transform public schools to school-based management. In 1991, the Education and Manpower Branch and Education Department of the Hong Kong Government initiated a new scheme called the "School Management Initiative" (SMI), to induce a type of school-based management framework in public schools. Within the span of a few years, more and more school principals, teachers, and supervisors accepted the idea and principles of school-based management. There was a clear diffusion of SMI ideas, concepts, skills, and experiences from pilot SMI schools to new SMI schools and from SMI schools to non-SMI schools (Cheng & Cheung, 1999). With strong evidence for the positive effects of SMI in 1997, the Education Commission required all Hong Kong public schools to implement school-based management by 2000 (Education Commission, 1997). In February 2000, the Advisory Committee on School-based Management published a consultation document to ask for strengthening the role, structure, and governance of school management for accountability in the transition towards school-based management. There has been a hard negotiation process between the school-sponsoring bodies and the government in restructuring an existing school governance that relies heavily on volunteer school-sponsoring bodies.

4.2 Report No. 7: Quality School Education

The Education Commission required time to recognise the drawbacks of the first wave strategies and adopt a school-based approach to education reform. In 1997, the Education Commission in its Report No. 7 recommended the following:

- Schools should be helped to set goals and indicators for monitoring and evaluating quality education;
- All schools should have put in place school-based management in the spirit of SMI by the year 2000 as the internal quality assurance mechanism;
- Education Department adopts a whole-school approach to quality assurance inspection and sets up a quality assurance resource corner;
- All schools which have put in place school-based management should enjoy the management and funding flexibility under the SMI;
- Government should set aside a substantial amount of money to establish a "Quality Education Development Fund" to fund one-off projects for the improvement of education quality on a competitive basis; and
- Government should raise the professional standards of principals and teachers through providing coherent pre-service and in-service training and setting up a General Teaching Council, and all schools should be required to put in place a fair and open performance appraisal system for principals and teachers.

These policy recommendations point to a school-based approach as a mechanism for establishing more comprehensive education quality assurance and school effectiveness.

4.3 Government Initiatives Since 1997

After the handover of sovereignty in 1997, the new Hong Kong SAR government made great efforts to analyze Hong Kong's new role, define its positioning in the region and in the international community, and plan long-term development for the future of Hong Kong in the coming century. The significance and value of quality education to the future of Hong Kong were well appreciated by the first chief executive of the Hong Kong SAR, Mr. Tung Chee-hwa (Tung, 1997a, b). In his policy address of 8 October 1997 he presented an important blueprint for the educational development of Hong Kong in the new century. It supported the measures proposed by the Education Commission Report No. 7. It also set a time schedule to review and streamline the education-related executive and advisory structure. It asked the Education Commission to conduct a thorough review of the structure of pre-primary, primary, secondary, and tertiary education, as well as the school curriculum and examination system, even as the Board of Education was completing a review of the nine-year compulsory education policy (Board of Education, 1997).

Since the delivery of the policy address in 1997, a number of reviews have been conducted and initiatives introduced on teacher education and principal training, educational aims, information technology, Education Department, and Quality

_

Education Fund. Some key progresses of these developments are summarised as follows:

4.4 Review and Initiatives on Teacher Education and Principal Training

In accordance with the new SAR government policy on enhancing teacher quality, both the Advisory Committee on Teacher Education and Qualifications (ACTEQ) and University Grants Committee (UGC) of the Hong Kong SAR government started in 1997 to review the existing in-service and pre-service teacher education program in Hong Kong. They finished their reports in January and February 1998, respectively, and submitted them to the Government. The emphasis was on the development of a trained and graduate teaching profession, and all in-service teachers were encouraged to pursue continuing professional development.

A new leadership role for school principals has become crucial to effectively implement educational change and school-based management for quality education. In order to strengthen their leadership competence, in the past few years, the government had set up various task forces or committees to establish a framework requesting aspiring principals, newly appointed principals and serving principals to pursue continuing professional development (Task Group on Training and Development of School Heads, 1999; Education Department, 2002).

4.5 Education System Reviews and New Proposals

In 1999 and 2000, the Education Commission reviewed education aims and structures and proposed a new framework for reforming early childhood education, school education, tertiary education, and continuing education (Education Commission, 1999 January, September; 2000 May, September). In setting the direction and formulating proposals for reform, the Commission claimed to adopt principles including student-focused, "no-loser," quality, lifelong learning, and society-wide mobilisation (Education Commission, 1999 January). The focus of the whole reform package is on the following:

- Reforming the admission systems and public examinations so as to break down barriers and create room for all;
- Reforming the curricula and improving teaching methods;
- Improving the assessment mechanism to supplement learning and teaching;
- Providing more diverse opportunities for lifelong learning at senior secondary level and beyond;
- Formulating an effective resource strategy;
- Enhancing the professionalism of teachers; and
- Implementing measures to support the frontline educator.

Since the proposals covered a wide range of crucial issues and large-scale changes, they have stimulated a number of debates. Even though the direction and

_

principles of education reform proposed were generally welcomed by the public, how and why these proposals and recommendations could be effective in order to serve the principles of education reform and the new aims of education in practice has been a major concern among the public. Particularly, without clear research evidence and a sound knowledge base in support of these proposals, it was really difficult to convince the public or educators that they were feasible, effective, and practical in terms of implementation.

4.6 Review and Change of Curriculum

Echoing the new education aims, principles and proposals for reform proposed by the Education Commission in 1999 and 2000, the Curriculum Development Council published its proposals on curriculum change and development in November 2000. In this report, the Council has proposed some guiding principles in planning a new curriculum framework that aims to provide schools with a structure for outlining and developing different curriculum modes. It was hoped that, with this framework, the teaching contents could be flexibly rearranged, modified or replaced in response to the needs of society and suit the different needs of students. The key components of the curriculum framework include eight Key Learning Areas as the bases for knowledge building. It also includes a platform to enhance cross-subject cooperation and facilitate students to "learn how to learn"), Generic Skills (for helping students learn how to learn, such as collaboration skills, critical thinking skills, problem-solving skills, communication skills, information technology skills, self-management skills, creativity, numeracy skills, and study skills), and Values and Attitudes (nurturing of students' personal dispositions through the related topics and learning targets in the eight Key Learning Areas). The council also proposed a beyond ten-year schedule for implementing curriculum reform: short-term strategies (2000-2005), medium-term strategies (2005-2010), and long-term strategies (2010 and beyond). In the short-term development, it is expected that:

Based on the principles of the curriculum reform, the Education Department will develop new curriculum guides, subject guides and exemplars, and teaching/learning materials; engage in research and development projects and disseminate good practices.

- Teachers and schools can promote learning to learn through infusing generic skills into existing school subjects.
- The following key tasks have been shown to be useful strategies for promoting learning to learn: moral and civic education, promoting a reading culture, project learning, and the use of information technology.
- Schools can prepare for the transition to the new curriculum framework and gradually develop a school-based curriculum, using the new framework to suit the needs of students and schools.
 - In the medium-term development the following are expected:
- Schools should have followed the central directions and used the curriculum guides of the open framework provided to develop a school-based curriculum most suited to the abilities and needs of students and the mission of the schools.

They should continue to raise their quality of teaching and learning.

And finally, in long-term development, a vision for lifelong learning is to be achieved. This curriculum framework is still in hot debate. In particular, many people are concerned with its feasibility and effectiveness.

4.7 Information Technology in Education

In facing the challenges of the transformation of a traditional economic system to high technology and high value-added industries in a new era of globalisation and information, there is a pressing need to promote information technology (IT) in education for improving teaching and learning and equipping the young people to meet all those challenges. In 1997, the SAR government started to allocate substantial capital costs and annual recurrent costs for the implementation of a series of internet technology (IT) initiatives in education, and in 1998 the Education and Manpower Bureau (EMB) published its policy paper, *Information Technology for Learning in a New Era*, to outline a five-year strategy (1998/99-2002/03) for promoting IT in education, with the missions as follows:

- To provide adequate IT facilities, including network facilities, for our students and teachers to enable them to access information;
- To encourage key players in the school system to take up the challenges of their respective new roles;
- To integrate IT into school education meaningfully through necessary curriculum and resource support; and,
- To foster the emergence of a community-wide environment conductive to the culture change (Education and Manpower Bureau, 1998a).

From past experience of education reform, mere large-scale resources input and training have demonstrated they are not sufficient to bring effective change and outcomes in the classroom and at the school level. How the school management and professional culture can match the huge investment in IT hardware and training, and transform them into effectiveness, quality, and relevance in education at the site and the individual level, is still a challenging question for reformers of IT in education in Hong Kong.

4.8 Review and Restructuring of the Department of Education

Following the implementation of decentralisation and school-based management, the traditional role of the Education Department of the Hong Kong SAR government was inevitably challenged by the public. After the policy address of 1997, the SAR government had appointed a management consulting firm to conduct a review of the organisational and management structure of the Education Department, with the final objective to "enable it to function more efficiently, effectively and responsively in its mission to provide quality education" (Education and Manpower Bureau, 1998b). The final report on the review was issued in July 1998 for public

consultation. The report made some recommendations to change and streamline the structure and organisation of the Education Department. With the results of this review and consultation, the Education Department initiated some internal changes towards more professionalism to support school education. But at the beginning of 2003, the Education Department was merged into the Education and Manpower Bureau. This means that the Bureau is now responsible not only for formulating education policies but also their monitoring and implementation. It is still too early to say whether such a merger can be effective and efficient to meet the needs of current education reforms.

4.9 Quality Education Fund

As part of the reform policies to encourage school-based innovation and initiative for promoting the quality of education, the SAR government established the Quality Education Fund (QEF) on 2 January 1998 with an allocation of \$5 billion. QEF mainly supports worthwhile non-profit-making initiatives for basic education, including pre-primary, primary, secondary, and special education. These projects are intended to promote the quality of teaching and learning in schools; allround education; school-based management projects; and educational research (Quality Education Fund 1998). Recently, the implementation and effectiveness of QEF have been reviewed. It is clear that many school-based initiatives have been encouraged and promoted by the generous financial support of QEF. But at the same time, the way a comprehensive knowledge base for effective practice of school education in Hong Kong can be generated and accumulated from the numerous school-based initiatives is still an important issue. In particular, many schools spent their scarce resources (particularly teachers' time and energy) to "re-invent the wheel" or "beginning from scratch" in a fragmented and piecemeal way when they implemented their school-based initiatives, particularly in the area of using information technology.

5. CONSTRAINTS AND CHALLENGES TO ONGOING REFORMS

Since, 1997, the education environment in Hong Kong has been changing very fast. The second wave of Hong Kong education reforms has passed quickly. To a great extent, it has carried characteristics similar to the international emphasis on education quality, accountability, and stakeholders' expectations. It is also clear that there is a strong awareness of future relevance in the reform, but how the reform proposals and strategies are related to the achievement of future effectiveness in education is still unclear and controversial.

Since the life cycle of the second wave has been short, many major proposals for reform are still at the development stage. It is too early to document any policy effects. Particularly, even though the new vision and aims of education are attractive and encouraging, many recommendations are still only broad guiding principles or general education ideas, without any concrete implementation plans or strategies. Although some specific proposals have been proposed (e.g., language benchmark

GLOBALISATION AND EDUCATION REFORMS IN HONG KONG: PARADIGM SHIFTS

tests for language teachers and language media of instruction), most of these have become very controversial and have attracted serious criticism. Many ongoing debates were mainly based on personal opinions, different party interests, or political concerns, without any sophisticated analysis or concrete research support. When compared with the huge scale and scope of education reform, the knowledge base for policy discussion and formulation appears to be shallow, atheoretical, and powerless.

Based on the author's recent research on paradigm shifts in education and education reform (Cheng, 2000b; 2001a, b, 2002, 2003a, b, Cheng & Chan, 2000), this chapter tries to point out some fundamental constraints that are tightly restricting the development and success of the ongoing second wave in Hong Kong. As shown in Table 1, there are five major categories of constraints: knowledge constraints, structural constraints, social constraints, political constraints, and cultural constraints. Among these, knowledge constraints are crucial as they seriously limit the possibility of redressing other types of constraints. In other words, if there were fewer knowledge constraints, the change agents or policy makers would have better "knowledge power" to produce clearer ideas and strategies to overcome other types of constraints. Due to the length limit of this chapter, only the knowledge constraints will be discussed here in detail.

Currently, Hong Kong is reforming its whole education system from preeducation to tertiary and continuing education. The scope of reform is so huge and the nature of change is so fundamental, that a strong and comprehensive knowledge system is really needed to support such large-scale reform as well as numerous related initiatives at different levels of the education system and at different stages of development. But unfortunately, there is an absence of such a knowledge system, and the development of current reform is suffering.

5.1 Lack of Research and Data Base

In the second wave of reforms, there was an intended strategy to use research to inform policy making, including, for example, the strategies as outlined in the Education Commission Report No. 7 (1997): "draw reference from experiences and research materials in and outside Hong Kong; research into specific issues related to the review." Unfortunately, in practice, research-based policy development is still a rarity and luxury in Hong Kong (Cheng, Mok & Tsui, 2002). For example, the Education Commission had a very tight schedule of just one to two years but had to review the whole education system and make numerous recommendations in 1999-2000. What kind of research and knowledge can they expect except their own experience and ideas as well as some overseas experience without rigorous analysis? It is not surprising that there is lack of a comprehensive and relevant knowledge base to support policy development and implementation, even though the reform of the second wave was so large-scale and influential.

5.2 Lack of Critical Mass of Information

Hong Kong is a small place with a population of around 6.8 million. While there are eight tertiary institutions, only four have faculties or departments of education. The Hong Kong Institute of Education has 400 academic staff and the other three institutions have a total of around 160. These numbers are in fact not large when compared with the large scale of education reform and the numerous areas of education at different levels from kindergarten to tertiary that are going to be changed. In other words, there may not be the critical mass of education expertise in each area to provide the necessary expertise, intelligence and knowledge base to support reform, even if all of them may have been motivated and involved in the reform.

Unfortunately, there is also the absence of any centrally established research institute to coordinate the research and expertise that are now separated and working in different institutions without any coordinating framework. Furthermore, there are no full-time educational researchers in Hong Kong. Nearly all academic staff in education in Hong Kong tertiary institutions have a major role in teaching in the teacher education programs. Therefore, it is not surprising that in many important areas, there is still a *lack of a critical mass* of researchers to generate data and support reform and practice at different levels.

 Table 1: Potential Constraints in the Ongoing Education Reform

Data Constraints	Structural Constraint	Social Constraints	Political Constraints	Cultural Constraints
Lack of research and knowledge base for reform at different levels	Unclear leadership and role in reform	Losing confidence and trust in education and the profession	Over-driven by public media and political concerns	Losing meanings and beliefs in local education
Lack of a critical mass of researchers and experts to support reforms in different areas	Lack of full time/high quality professional teams as think tank and change agent	Lack of commitment and satisfaction with reform	Lack of strong alliances in the profession to support reform	Lack of understanding of and commitment to new paradigm of education
Part-time data for policy-making	Part-time and diverged leadership in reform	Increasing stress and criticism of schools and teachers	Self-defense to reduce loss in changes	Lack of cultural leadership at different levels
Piecemeal, repeated data and knowledge in school-based development diluting data in the teaching profession	Not knowing the existing strengths and losing quality people in teaching profession and unstable education department	Uncertain and anxious about their roles and responsibilities overburdened with existing workload and new initiatives	Mutual blame for failures making more enemies than alliances in reform too many fires to threaten schools and teachers	Creating inconsistent and conflicting messages to dilute the meanings and vision of reform. Lack of positive images and signals to stimulate the morale of teachers
Disappearing bureaucratic/ technocratic intelligence	Disappearing bureaucratic role and responsibility	Losing trust in the bureaucracy and reform	Losing legitimacy due to the failure of previous reform	Losing trust in the espoused direction of reform

Lack of an	Lack of a	Lack of	Lack of a	Lack of a cultural
intelligence	sophisticated	optimism and	politically safe	platform for
platform at both	operation	encouraging	platform for	communication:
the school and	platform at both	social platform	innovation:	misunderstanding,
system levels:	school and	for schools &	resistance,	mistrust, and poor
ignorance,	system levels:	teachers:	conservation,	morale
repeated failure,	inconsistencies,	disengagement,	and self-	
learned	gaps, and	frustration, and	defense	
incompetence	hindrances	anxiety		
and helplessness				

5.3 Part-Time Competence in Policy-Making

At present, the advisory committees in education have involved many tertiary scholars, school practitioners, and community leaders in contributing advice and ideas for policy formulation. Chairs of key advisory committees are often business or non-education leaders appointed by the government. This arrangement is a tradition to encourage wide participation and input for policy-making. But in these years, the scope and nature of education reform are complicated and changing fast. All these committees are challenged and demand far more than part-time commitment; and most members are successful leaders who may have already several, if not many, other important and substantial community commitments in addition to their full-time job. It follows that policy making of large-scale reform is led by "part-time competence," if not "bounded data."

5.4 Piecemeal and the School-based knowledge

Since the implementation of school-based management, schools are assumed to develop, manage, and improve their activities and operation by themselves. Schools often start from scratch in accumulating experience, knowledge, and intelligence, particularly when they want to make any school-based changes or innovations such as using information technology in education. For example, with the support of QEF, a software process automation system, many schools in Hong Kong develop their own multi-media materials and software for teaching and learning. Even though many teachers are very committed and spend a lot of time to learn, prepare, and produce the materials, unfortunately the quality of materials is not always the best and the technology and knowledge teachers use and accumulate are modest, piecemeal, and repetitive. It is ineffective if teachers' scarce time and efforts are used in such a way instead of directly helping and guiding their students. A central knowledge platform, with the necessary intellectual resources and materials to support school-based initiatives, would leave teachers more time and opportunity to work with their students.

5.5 Diluting Competence in the Profession

In the past decade, there had been a serious brain drain from Hong Kong to other countries due to the political transition from the British colonial government to a Special Administrative Region (SAR) of China. Many experienced and qualified teachers and educational professionals migrated overseas. Furthermore, due to the implementation of many new education initiatives and the establishment of the Curriculum Development Institute and the Hong Kong Institute of Education, many high quality teachers were selected away from primary and secondary schools. All these developments are diluting the expertise and quality of the teaching profession that are necessary for effective teaching in the classroom and the successful implementation of education innovations.

5.6 Disappearing Bureaucratic Expertise

Since the 1990s, the top leadership of the Education Department has changed frequently, from a few months to two or three years, while other senior officials have been repositioned to different offices. The bureaucratic or technocratic competence that had been accumulated slowly over the past years in the previous Education Department was disappearing quickly due to the fluid personnel and frequent changes in leadership. Without this bureaucratic competence, the development and implementation of new initiatives became more ad hoc, unstable, and unreliable and often ignored some important ecological relations in the policy environment (Cheng & Cheung 1995; Cheng, Mok & Tsui 2002). Following the implementation of school-based management and the merger of the Education Department into the Education and Manpower Bureau (EMB), questions need to be raised about the way the EMB could play a new and successful role in leading education reform.

5.7 Lack of an Informed Platform

Hong Kong lacks a sophisticated informed platform at the school and system levels, one that could provide the necessary technology, information, and other intellectual resources to support effective formulation and implementation of education reform, school-based initiatives and practices (Cheng, 2001c). Without such a platform, it is not surprising that ignorance of reform complexity, repeated failure, learned incompetence, and learned helplessness can often be found not only at the individual and school levels but also at the community and system levels. Many people do not understand the complexity of education reform and lose their direction in the policy debate and implementation because they are not supported with any concrete research evidence or a comprehensive knowledge base. Without systematic knowledge support and expert advice based on past experiences particularly from lessons learned from previous reform, many school-based practices repeat failures. Many educational practitioners feel themselves powerless, helpless,

and incompetent in changing their educational environment and managing their teaching practices and begin to distrust and resist education reform.

6. TOWARDS THE THIRD WAVE OF EDUCATION REFORM

Hong Kong is now struggling to overcome all types of knowledge, structural, social, political, and cultural constraints and is unable to carry out ongoing reforms necessary to meet challenges in a new era of globalisation. Even though the second wave of education reforms in Hong Kong raised a strong awareness of the changing local and international environment, it remains unclear how the proposed recommendations and strategies are relevant in addressing the future of Hong Kong. From an analysis of the constraints as well as the international trends in education reforms (Cheng, 2003a,c; in press), six key implications may be proposed to accelerate the move towards a third wave of education reforms in Hong Kong. They include (1) "From Tight-loose Coupling Theory to Platform Theory"; (2) "Integration of Central Platform Approach and School-based Approach"; (3) "From Localisation to Triplisation"; (4) "From Separated Intelligences to Transfer of Multiple Intelligences"; (5) "From Qualified Teachers/Schools to Developing CMI Teachers/Schools."; and (6) "From Site-Bounded Education to Triplisation Education."

6.1 From Tight-Loose Coupling Theory to Platform Theory

In the second wave of reform in Hong Kong or other parts of the world, the measures of school-based management, accountability, and quality assurance are strongly emphasised to ensure interface effectiveness. The rationale for school development and improvement is based on the tight-loose coupling theory that encourages school autonomy within a clear accountability framework (Cheng, 1996). This theory implicitly encourages the reform policy efforts on setting up an accountability and quality framework and restructuring school governance and at the same time allowing schools to manage, develop, and function by themselves to meet the expectations of the framework given at the interface between their schools and the community.

6.2 Limitations of a School-based Approach

School accountability is not sufficient to meet the challenges of globalisation and the needs of the future. Firstly, as discussed at the beginning of this chapter, interface effectiveness is not necessary to be effective. The expectations of stakeholders are often local and short term, and their relationship to the future in a context of globalisation and transformation in a new millennium may not be strong and clear. The satisfaction of stakeholders in the short-term or middle term is not necessarily relevant to the future needs of students and the whole society.

Secondly, education should not be seen as a low-technology and low-expertise "business" such that every school can use a school-based approach, a labour-intensive approach, or a low-expertise approach to create a very stimulating and effective environment for learning and teaching. Many schools and teachers in Hong Kong are spending time creating their "home-made" "high-tech" materials for teaching and learning. They are also encouraged to form various types of networks for mutual sharing of experiences, ideas, and best practices. Even though experience sharing is good, it is still not sufficient to raise the level of knowledge, expertise, and technology used in education. In other words, a school-based approach may be good to promote human initiative at the school level but it is not sufficient to raise the level of expertise and technology for education.

6.3 Toward Platform Theory

Given the limitations of a school-based approach, we should give up the tight-loose coupling theory and employ a platform theory. This means that the formulation and practice of education reforms should be based on a high-level expertise platform with the following functions (Cheng, 2001c):

In practicing school initiatives and education activities, teachers and students can start from a higher-level expertise platform that can provide state-of-the-art knowledge and technology. They can concentrate their energy and time to use this platform for education and school operations, rather than wasting their time to begin from scratch. Of course, in the spirit of school-based management, they have their flexibility and autonomy to decide how to use the platform more effectively to meet the school-based needs.

The platform can provide the critical mass of information and knowledge to generate new ideas, information, and technology to support education reforms and school education and ensure the relevance of the policy development and educational practice for the future. The platform itself can be individually, locally, and globally networked to expand the critical mass of information, maximise availability of intellectual resources and create numerous opportunities for continuous expertise development at different levels of education in Hong Kong.

In addition to the information platform, the provision of structural, social, political, and cultural platforms is also very important to education reforms and school management. How to overcome various types of constraints, develop these platforms and facilitate schools and teachers to perform at a high level, is really a crucial strategic issue for further exploration in current education reforms in Hong Kong or other parts of the world.

6.4 Integration of a Central Platform Approach and School-based Approach

The establishment of a central platform is capital-intensive, knowledge-intensive, and technology-intensive. Clearly it cannot be done by individual schools or using a school-based approach. It should be the major task of the government.

Both the central platform approach and school-based approach have their own strengths and limitations. The former can be used to raise the level of data, knowledge, and technology used by all practitioners in education and to avoid piecemeal, repeating and ineffective efforts starting from the beginning. The latter can be used to promote human initiative in the process of learning, teaching, and management and address the diverse developmental needs at the site levels. Both are necessary and important to education reforms. Depending on the degree these two approaches are used, there may be four scenarios for education reforms in the coming years, including Scenario A (High expertise platform + High human initiative), Scenario B (Low expertise platform + High human initiative), Scenario C (High expertise platform + Low human initiative), as shown in Figure 1.

Figure 1: Scenarios of Education Reforms in Hong Kong

•	C High Intelligent Platform Low Human Initiative	A High Intelligent Platform High Human Initiative	
_	D Low Intelligent Platform Low Human Initiative	B Low Intelligent Platform High Human Initiative	

Theoretically or from the past experiences, we may prefer Scenario A, emphasising the strengths of both a central platform approach and a school-based approach. How we can shift the ongoing education reforms in Hong Kong from mainly Scenario B towards Scenario A is really a strategic issue to be explored.

6.5 From Localisation to Triplisation

The rationale of the second wave reform is mainly based on the concept of localisation including decentralisation, school-based management, stakeholders' expectations and satisfaction, and accountability to the local community. When compared with international trends (Cheng, 2002), the second wave of Hong Kong education reforms should move towards the third wave, with emphasis on triplisation, including not only localisation but also globalisation and individualisation. As discussed in Cheng (2000b), through responding to globalisation, reform initiatives can maximise the global relevance of educational practices and outcomes and bring intellectual resources and support in schooling, teaching, and learning from different parts of the world. Through localisation, the

local relevance of educational practices, community support, and indigenous resources can be achieved for schooling, teaching, and learning. Also, through individualisation in education, the motivation, initiative, and creativity of students and teachers can be maximised in teaching and learning. As shown in Table 2, there are some implications for educational reforms through triplisation to achieve unlimited opportunities and multiple global and local resources for learning and development of students and teachers (Cheng, 2000b). Recently there has been increasing evidence that more and more Hong Kong schools have started to globalise, localise and individualise their educational practices to different extents.

6.6 From Separated Intelligences to Transfer of Multiple Intelligences

From Howard Gardner's (1993, 1999) framework of nine (Gardner added the last two in *Intelligence Reframed*, 1999) human intelligences, including musical, bodily-kinaesthetic, logical-mathematical, linguistic, spatial, interpersonal, and intrapersonal intelligence, naturalist intelligence, and existential intelligence, the current education reforms in Hong Kong have emphasised the development of students' multiple intelligences as one of the major new education aims for the future.

I have argued elsewhere that human intelligence should be contextualised and categorised into six contextualised multiple intelligences (CMI), including technological, economic, social, political, cultural, and learning intelligence (Cheng, 2000b). Also, a Pentagon Theory was proposed to develop CMI, promote learning intelligence, and facilitate mutual transfer of multiple intelligences as the core activities of new education. Intelligence transfer from one type to other types (e.g., from economic to political or social intelligence) represents the achievement of a higher level of intelligence or meta-thinking. The transfer itself can also represent a type of intelligent creativity and generalisation. It is believed that inter-intelligence transfer can be transformed into a dynamic, ongoing, and self-developing process not only at the individual level but also at the group, institutional, and community levels. This will be very important to the creation of a high level knowledge-based economy or an intelligent society. Therefore, the concept of CMI and the Pentagon Theory provides a new paradigm to reforming education, curriculum, and pedagogy in Hong Kong or elsewhere in the world. This paradigm is different from the traditional thinking of development of separated intelligences.

 Table 2: Implications of Triplisation for Education Reforms

	Conceptions and	Implications for
Triplisation	Characteristics	Education Reforms
Globalisation	Transfer, adaptation, and	To maximise the global
	development of values,	relevance and bring intellectual
	knowledge, technology	resources and various initiatives
	and behavioral norms	from different parts of the world
	across countries and	in schooling, teaching, and
	societies in different parts	learning: e.g., Web-based
	of the world:	Learning International
	Global Networking	Visit/Immersion Program
	Technological, Economic,	International Exchange Program
	Social, Political, Cultural,	Learning from Internet
	and Learning	International Partnership in
	Globalisation	Teaching and Learning at group,
	Global Growth of Internet	class, and individual levels
	International Alliances	Interactions and Sharing through
	and Competitions	Video-Conferencing across
	International	Countries, Communities,
	Collaboration &	Institutions, and Individuals
	Exchange Global Village	Curriculum Content on
	Multi-cultural Integration	Technological, Economic,
	International Standards	Social, Political, Cultural, and
	and Benchmarks	Learning Globalisation

Localisation	Transfer, adaptation, and	To maximise the local
Localisation	development of related	
		relevance, community support,
	values, knowledge,	and indigenous initiatives in
	technology, and behavioural norms from/to	schooling, teaching and
		learning: e.g.,
	the local contexts:	Community involvement;
	Local networking	Parental involvement &
	Technological, economic,	education;
	social, political, cultural,	Home-school collaboration;
	and learning localisation;	School accountability;
	Decentralisation to the	School-based management;
	local Site Level;	School-based curriculum;
	Indigenous culture;	Community-related
	Community needs and	curriculum;
	expectations;	Ability grouping;
	Local involvement,	Curriculum content on
	collaboration and support;	technological, economic,
	Local relevance and	social, political, cultural, and
	legitimacy;	learning localisation
	School-based needs and	
	characteristics;	
	Social norms and ethos.	
Individualisation	Transfer, adaptation, and	To maximise human
	development of related	motivation, initiative, and
	external values, knowledge,	creativity in schooling,
	technology, and	teaching, and learning: e.g.:
	behavioural norms to meet	Individualised educational
	the individual needs and	programs;
	characteristics:	Individualised learning targets,
	Individualised services;	methods, and progress
	Development of human	schedules;
	potential in technological,	Self lifelong learning, self
	economic, social, political,	actualising, and self initiative;
	cultural and learning	Self managing students,
	aspects;	teachers, and schools;
	Human initiative and	Meeting special needs;
	creativity;	Development of contextualised
	Self-actualisation;	multiple intelligences.
	Self-managing and self-	maniple intelligences.
	governing;	
	Special needs.	

Note: adapted from Cheng (2000b)

6.7 From Qualified Teachers/Schools to Developing CMI Teachers/Schools

The success of implementing CMI education for students depends heavily on the quality of teachers and the school. Whether teachers themselves can develop and own a higher level of CMI and whether the school can be a CMI organisation and can provide a CMI environment for teaching and learning will affect the design and implementation of CMI education. Therefore, in the reform of school education in Hong Kong for the future, how to develop teachers as CMI teachers and schools as CMI schools through staff development and school development inevitably will become an important and necessary agenda.

6.8 From Site-Bounded Education to Triplisation Education

With the concepts of triplisation and CMI, there is a clear paradigm shift in education from the traditional site-bound paradigm towards a new triplisation paradigm in a context of globalisation. In the new paradigm, students, teachers, and schools can be considered to be triplised: *globalised*, *localised*, and *individualised* during the process of triplisation, with help of the information technology and boundless multiple networking. Both students and teachers can achieve unlimited opportunities and multiple global and local sources for lifelong learning and development. New curriculum and pedagogy place students at the centre of education and facilitate triplised learning, making its process interactive, self-actualising, discovery-oriented, enjoyable, and self-rewarding. Teachers can provide world-class learning for students. Students can learn from world-class teachers, experts, peers, and learning materials from different parts of the world in any time frame and get local, regional, and global exposure and outlook as a CMI citizen (2000b).

7. CONCLUSION

This chapter has highlighted the three waves of education reforms in Hong Kong since the 1980s and earlier. These waves represent three different paradigms for pursuing educational effectiveness. These education reforms and related paradigm shifts have been highlighted in terms of the third wave taking place in a fast changing context of globalisation. But this does not mean that educational relevance in terms of future effectiveness is the only crucial concern or that education quality (i.e., interface effectiveness) and internal effectiveness are not important. The three waves of education reforms represent a change of emphasis, focus, and rationale in interpreting reality and formulating the priorities and strategies of education reform at different stages of development.

As an international city in this challenging era of globalisation, education reforms in Hong Kong should aim not only at internal and interface effectiveness but also emphasise the relevance of education to the future. How to enhance the three types of educational effectiveness and ensure their mutual linkages is a key concern for research and practice in the current education reform in Hong Kong in

moving towards the third wave. On the one hand, people in Hong Kong are concerned with, whether the existing education system and practices are effective in achieving planned goals at different levels and, on the other hand, whether the quality of school education can satisfy the diverse and high expectations of stakeholders in the competitive, changing, and demanding environment in which Hong Kong functions. Further, how the aims, content, practices, outcomes and impact of education are relevant to the developmental needs of individuals and the Hong Kong society as a whole in the era of globalisation is another critical issue in ongoing education reforms.

We expect that the platform theory will replace the tight-loose coupling theory in Hong Kong and a single school-based approach will be replaced with the central platform approach. A triplisation movement consisting of globalisaton, localisation, and individualisation in education will replace the implementation of a single localisation framework, and a pentagon theory on the development and transfer of contextualised multiple expertise will replace an emphasis on separate intelligences in education, the development of CMI teachers and schools will replace traditionally qualified teachers and established schools, and the triplisation paradigm will replace the site-bound paradigm in education.

In facing up to the challenges of globalisation, the people of Hong Kong have shown a strong commitment to education reform for enhancing social and economic developments in the new century. Even though a number of drawbacks and difficulties will inevitably be encountered in the policy formulation and implementation processes, numerous good opportunities are being created in the second wave and the coming third wave for policy-makers, school practitioners, and educational researchers to pursue educational innovation and effectiveness for the future. The ongoing educational experiments, reform experiences, improvement practices, and effectiveness studies at both the school and system levels should benefit not only the Hong Kong people, but should also make a substantial contribution to the international concern for globalisation and education reform in the new century.

8. REFERENCES

- Board of Education. (1997). Report on review of 9-year compulsory education. Hong Kong, Government Printer.
- Cheng, Y. C. (1993c). The theory and characteristics of school-based management. *International Journal of Educational Management*, 7(6): 6-17.
- Cheng, Y. C. (1996b). School Effectiveness and School-Based Management: A Mechanism for Development. London, UK, The Falmer Press.
- Cheng, Y. C. (2000a). Educational Change and Development in Hong Kong, Effectiveness, Quality, and Relevance, In Townsend, T & Cheng, Y. C. (eds), Educational Change and Development in the Asia-Pacific Region: Challenges for the Future. The Netherlands, Swets and Zeitlinger Publisher, pp.17-56
- Cheng, Y. C. (2000b). A CMI-Triplization Paradigm for Reforming Education in the New Millennium. International Journal of Educational Management. 14(4): 156-174.
- Cheng, Y. C. (2001a). Educational Relevance, Quality and Effectiveness: Paradigm Shifts. Invited keynote speech to be presented at the International Congress for School Effectiveness and School

- Improvement held in 5-9 January 2001 in Toronto, Canada, with the theme "Equity, Globalization, and Change: Education for the 21st Century".
- Cheng, Y. C. (2001b). Towards the Third Wave of Education Reforms in Hong Kong. Keynote speech at the International Forum on Education Reforms in the Asia-Pacific Region, held in 14-16 February 2001, Hong Kong.
- Cheng, Y. C. (2001c). The strengths and future of Hong Kong education. Invited keynote speech at the Conference of the Leadership Development Network on "Facing up Education reforms: Leading Schools for Quality Education", organized by the Asia-Pacific Centre for Education Leadership and School Quality 20 October 2001.
- Cheng, Y. C. (2002). Paradigm Shift in School Effectiveness: Internal, Interface, and Future, in Griffith, A. & Reynolds, C. (eds.). Equity and Globalization in Education, Calgary, Canada: Temeron Press, pp. 87-117.
- Cheng, Y. C. (2003a). Challenges and Research into Education Reforms in the Asia-Pacific Region, in Keeves, J. & Watanabe, R. (Chief Editors). The Handbook on Educational Research in the Asia-Pacific Region, Dordrecht, The Netherlands, Kluwer Academic Publishers, .section 8, pp.1315-1330.
- Cheng, Y. C. (2003b). New Vision of School-Based Management, in A. Volansky & I. Friedman (eds.). School-Based Management: International Perspectives, Jerusalem, Israel: Ministry of Education. (in both English and Hebrew editions), pp.31-56.
- Cheng, Y. C. (2003c). Trends in Education Reforms in the Asia-Pacific Region, in Keeves, J. & Watanabe, R. (Chief Editors). The Handbook on Educational Research in the Asia-Pacific Region, Dordrecht, The Netherlands, Kluwer Academic Publishers, (section 1, pp. 3-16.
- Cheng, Y. C. (in press). Fostering local knowledge and human development in globalization of education, International Journal of Educational Management.
- Cheng, Y. C. & Chan, M.T. (2000). Implementation of School-based Management: A Multi-perspective Analysis of Hong Kong Case. *International Review of Education*, 46(3-4): 205-232.
- Cheng, Y. C., & Cheung, W. M. (1995). A Framework for the Analysis of Educational Policy. International Journal of Educational Management, 9(6): 10-21.
- Cheng, Y. C., & Cheung, W. M. (1999). Towards School-Based Management: Uncertainty, Meaning, Opportunity and Development. *International Journal of Educational Reform*, 8(1): 25-36.
- Cheng, Y. C. Mok, M.M.C., & Tsui, K.T. (2002). Education Reforms and Research in Hong Kong, A Request for Comprehensive Knowledge. Educational Research for Policy and Practice. 1 (1), pp. 7-21.
- Cheng, Y. C. & Townsend, T. (2000). Educational Change and Development in the Asia-Pacific Region: Trends and Issues, in Townsend, T & Cheng, Y. C. (eds.), Educational Change and Development in the Asia-Pacific Region: Challenges for the Future. The Netherlands, Swets and Zeitlinger Publisher, pp. 317-344.
- Curriculum Development Council (2000, November). Learning to Learn: The Way Forward in Curriculum Development (consultation document). Hong Kong, Government Printer.
- Curriculum Development Council (2001, June). Learning to Learn: Life-Long Learning and Whole Person Development. Hong Kong, Government Printer
- Education and Manpower Branch, & Education Department. (1991). School Management Initiative. Hong Kong, Government Printer.
- Education and Manpower Bureau. (1997). *Policy Program: The 1997 Policy Address*. Hong Kong, Government Printer.
- Education and Manpower Bureau. (1998a). *Information Technology for Learning in a New Era.* Hong Kong, Government Printer.
- Education and Manpower Bureau. (1998b). Review of the Education Department (Consultation document). Hong Kong, Government Printer.
- Education Commission (1984). Education Commission Report No. 1. Hong Kong, Government Printer.
- Education Commission (1986). Education Commission Report No. 2. Hong Kong, Government Printer.
- Education Commission (1988). Education Commission Report No. 3: The Structure of Tertiary Education and the Future of Private Schools. Hong Kong: Government Printer.
- Education Commission (1990). Education Commission Report No. 4: Curriculum and students' behavioral problems in schools. Hong Kong, Government Printer.
- Education Commission (1992). Education Commission Report No. 5: The Teaching Profession. Hong Kong, Government Printer.

- Education Commission (1993, October 21). Education Commission Sets Up Working Groups. Press release.
- Education Commission (1996). Education Commission Report No. 6: Enhancing Language Proficiency: A Comprehensive Strategy. Hong Kong, Government Printer.
- Education Commission (1997). Education Commission Report No. 7: Quality School Education. Hong Kong, Government Printer.
- Education Commission (1999a). Education Blueprint for the 21st Century: Review of Academic System Aims of Education (Consultation Document). Hong Kong, Government Printer.
- Education Commission (1999b, September). Review of Education System: Framework for Educational Reform: Learning for Life (Consultation Document). Hong Kong, Government Printer.
- Education Commission (2000 May), Review of Education System: Reform Proposals (Consultation document). Hong Kong, Government Printer
- Education Commission (2000 September), Learning for Life, Learning through Life: Reform Proposals for the Education System in Hong Kong. Hong Kong, Government Printer.
- Education Department (2002). Continuing Professional Development for School Excellence. Hong Kong, Education Department of Hong Kong SAR government.
- Gardner, H. (1993). Multiple Intelligences: The Theory in Practice. New York: Basic Books.
- Gardner, H. (2000). Intelligence Reframed: Multiple Intelligences for the 21st Century. New York: Basic Books.
- Quality Education Fund (1998). Introduction to Quality Education Fund. Hong Kong, Author.
- Task Group on Training and Development of School Heads. (1999, June). *Leadership Training Program for Principals (Consultation paper)*. Hong Kong, Education Department.
- Tung, C. H. (1997a, July 1). A Future of Excellence and Prosperity for All. Speech delivered at the ceremony to celebrate the establishment of the Hong Kong. Special Administrative Region, Hong Kong.
- Tung, C. H. (1997b, October 8). Building Hong Kong for a New Era. Address delivered by the Chief Executive at the provisional Legislative Council meeting.